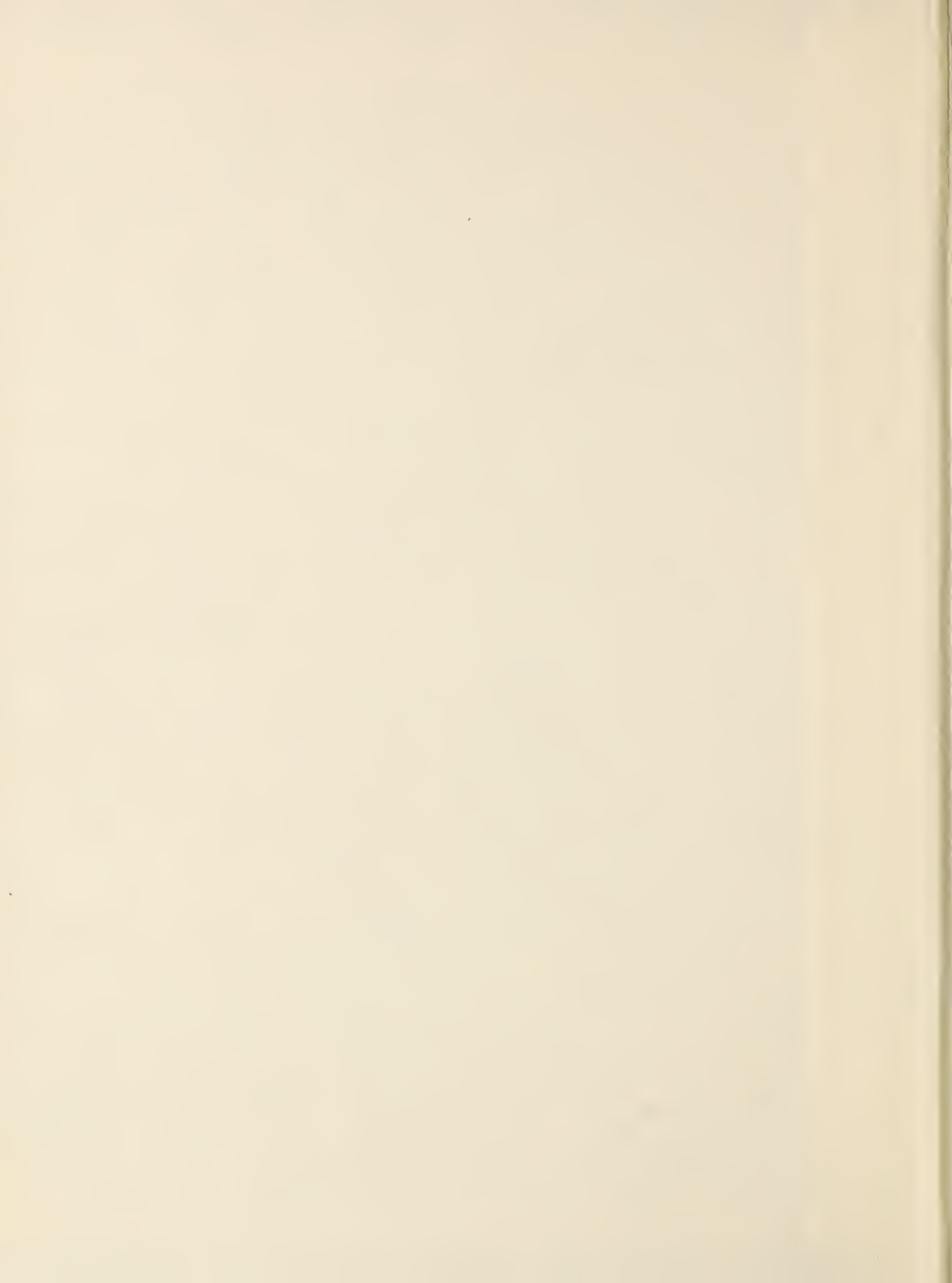




BINDERY SLIP

JOSEPH RUZICKA

Baltimore, Md.

Greensboro, N. C.

Buckram No. <u>2460 R14c</u>	Rub Enclosed
Pamphlet No.	New Title; Keep Rub
TP	Do Not Keep Rub
Tpc	Stub For
Index	Use Bench Sewing
Bind in Issues	Refold Plates
Covers	Before Trimming
Strip Ads in all but 1st No.	Mount on Guards
Strip Ads in all Nos.	Book Rate
Special Instructions	

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Gold lettering²

This Volume Lacks: Letter Spine Exactly as Shown Below

Clemson College
Newsletter

3-4

Oct. 1, 1963 -
June 1, 1965

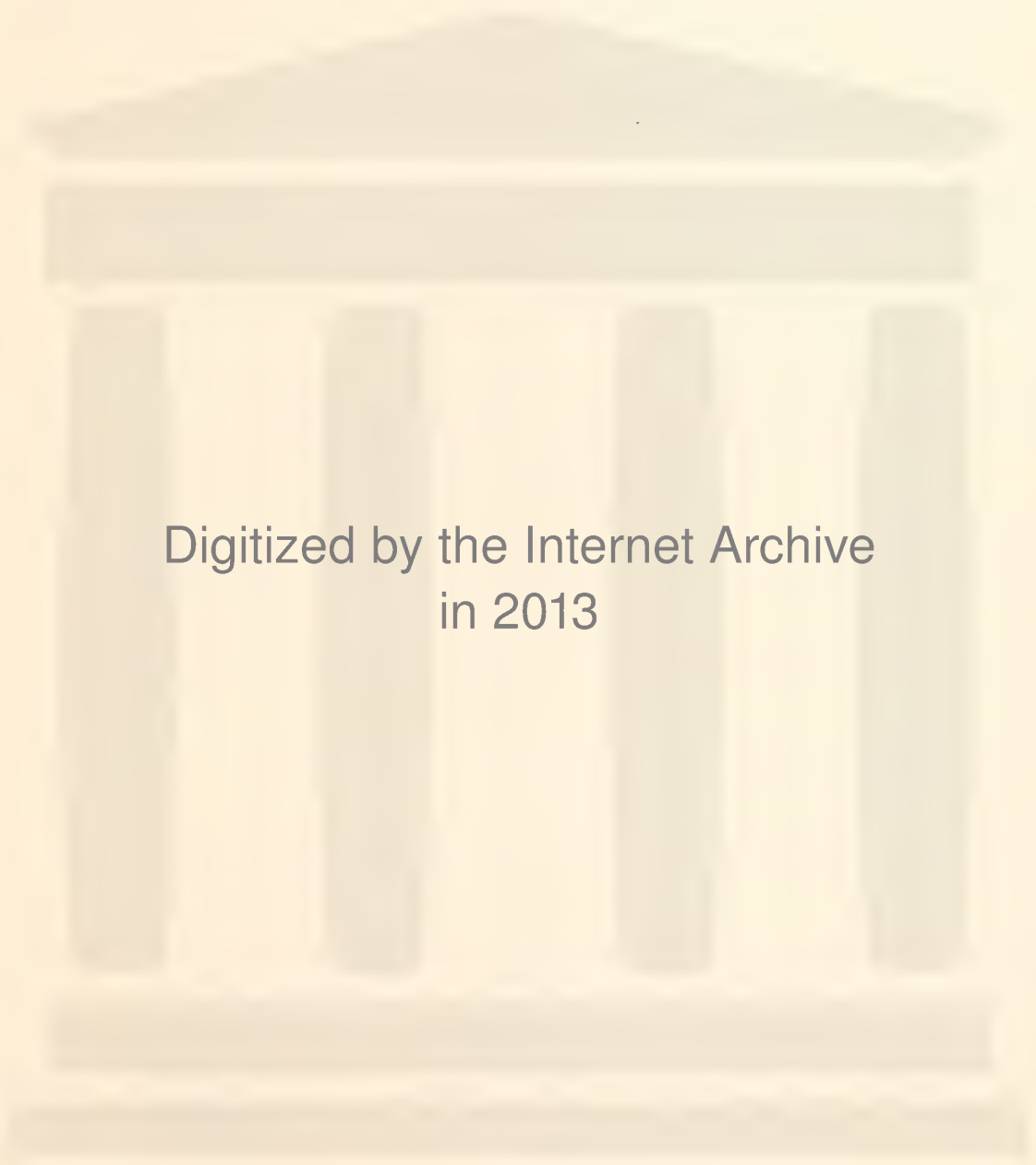
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v. 3-4,

Oct. 1, 1963- June 1, 1965



C L E M S O N

Newsletter

NOT FOR PUBLICATION

CLEMSON COLLEGE LIBRARY
SOUTH CAROLINA COLLECTION

Vol. 3 No. 1

October 1, 1963

CALENDAR: October 3-October 19

- Oct. 1-22 YOUNG AMERICANS 1962: A competitive exhibition for young crafts-
men under 30 years of age. For the 1962 exhibition, about 200
examples of wall hangings and other textiles, ceramics, metalwork,
and wood and enamel objects. Architecture Building.
- Oct. 3 Th Woman's Club, 4:00 p.m., Clemson House
- Oct. 5 S Football Game--N. C. State at Clemson
- Oct. 7 M Fred L. McNatt, Nitrogen Division, Allied Chemical Corp., will
speak on "Nitrogen Fertilizer Solutions and Herbicides."
11:00 a.m., Room A-203, PS&S Building.
- Oct. 7 M Dogan Kuban, Assoc. Prof. of Arch'l History, Istanbul Technical
University, will speak on "Turkish Architecture in Anatolia."
8:00 p.m. Architectural Auditorium.
- Oct. 8 T Dr. D. G. Karraker, Savannah River Plant, will speak. 4:00 p.m.,
Room 118, Brackett Hall.
- Oct. 8 T E. J. Elliott, FMC Corporation, will speak on "Personal Experiences
in the Chemical Industry." 7:00 p.m., Room 100, Earle Hall.
- Oct. 8 T E. R. Higgs, Senior Research Engineer, Saco-Lowell Shops, will
speak on "New Developments in Yarn Mill Machinery." 11:00 a.m.,
Auditorium, Sarrine Hall.
- Oct. 8 T Herman Jones, Research Engineer, Saco-Lowell Shops, will speak
on "The Spinning Mill of the Future." 11:00 a.m., Auditorium,
Sarrine Hall.
- Oct. 9 W AAUP, Dean Hugh Macaulay will speak. 8:00 p.m., Physics Auditorium.
Coffee will be served.
- Oct. 9 W Graduate wives, 8:00 p.m., Clemson House.
- Oct. 10 Th George M. Williams, Assistant Vice-President, Southern Railway
Co., Washington, D. C., will speak on "I've Been Working on the
Railroad." 2:00 p.m., Sarrine Auditorium.
- Oct. 12 S Football Game---Georgia at Clemson

CALENDAR: (continued)

Oct. 13	S	YMCA Concert by James Conis, pianist; Emily Stevenson, violinist, and C. M. Drake, cellist. 3:30 p.m.
Oct. 14	M	Forum Club, 7:00 p.m., Chemistry Building Conference Room
Oct. 15	T	Fellowship Club, B. E. Goodale will speak. 6:30 p.m., Clemson House
Oct. 15	T	James P. Kinard, President, Glen Ravin Mills, will speak on "The Marketing of Textiles." 11:00 a.m., Auditorium, Sirrine Hall.
Oct. 15	T	James Lucas, Furniture Designer, Director of Publicity for Hertian Miller, one of the leading manufacturers of good modern furniture, will speak on "Contemporary Furniture Design." 8:00 p.m., Architectural Auditorium.
Oct. 16	W	Laicos Club, 8:15 p.m., Clemson House.
Oct. 16	W	Newcomers Club, 8:00 p.m., Clemson House.
Oct. 19	S	Football Game--Duke at Durham.

COLLEGE CALENDAR (Revised 7-2-63)

Last day to drop a subject without record of drop	Thursday	October 10
Last day to order diploma for mid-year graduation	Saturday	October 12
Preliminary reports due	Monday	October 28
Clemson-Carolina game--classes suspended	Saturday	November 23
Thanksgiving holidays	Thurs-Sat	November 28-30
Last day to withdraw from college without having grades recorded	Tuesday	December 10
Christmas holidays begin at 1:00 p.m.*	Wednesday	December 18
Classes resume	Friday	January 3
Examinations begin	Thursday	January 16
Faculty meeting to consider candidates for grad.	Friday	January 24
Mid-year graduation	Saturday	January 25

*Follow Thursday, Friday, Saturday schedule Monday, Tuesday, Wednesday, December 16, 17, 18.

COMPUTER CENTER SEMINARS FOR FACULTY

The Computing Center will hold two seminars for faculty on programming the computer. A seminar for beginners will be held each Thursday from 1:15 to 3:00 in Room M4 in the Mathematics Building beginning September 26. A seminar on our new ACT IV compiler will be held each Monday from 1:15 to 2:30 in the same room beginning September 23. It will be assumed that those attending the Monday afternoon seminar will have had some exposure to some sort of programming for a computer, not necessarily ours.

HIGH SCHOOL VISITATION DAY

The annual college visitation day for prospective students and their parents is scheduled for Saturday, November 2. The program for the event will be the same as that followed last year.

RESEARCH GRANTS

Two research grants announced this month (September, 1963) are a \$9,108 grant to civil and chemical engineering from the S. C. Water Pollution Control Authority, and a \$34,599 grant to textile chemistry from the Southern Utilization Research and Development Division of the U.S.D.A. George Meenaghan (Ch.E.) and P. E. Robbins (TC) are the project leaders.

FACULTY DATA

The teaching and research faculties for 1963-64 number 378. Of these, 233 are employed as teachers, 85 as teachers and researchers, and 60 as researchers. Professional people employed in the public service divisions (Fertilizer Analysis, Livestock-Poultry Health, and Seed Certification) are not counted. Of the total faculties, 45.5 per cent hold the Ph.D. or its equivalent. For the academic (teaching) faculty, the Ph.D. percentage is 48.1.

The faculties hold earned undergraduate and graduate degrees from 189 different colleges and universities, located in forty-one states, the District of Columbia, and nine foreign nations.

RESEARCH FACULTY COUNCIL MEETING

The first meeting of the Research Faculty Council for the 1963-64 year will be held at 4:00 p.m. on Thursday, October 10, in Room F-150 of the Plant and Animal Science Building. This will be an important meeting at which the officers for the coming year will be elected and plans made for the activities of the year.

FIRST SEMESTER ENROLLMENT

This semester 4376 students are enrolled, an increase of 124 over the 4252 enrolled for the first semester 1962-1963. These students are distributed as follows:

	<u>Men</u>	<u>Women</u>	<u>Total</u>
New Students (High School)	1091	51	1142
(Transfer)	114	29	143
(Graduate)	<u>76</u>	<u>9</u>	<u>85</u>
Total New Students	1281	89	1370
Former Students Returning	150	10	160
Continuing Students	<u>2786</u>	<u>60</u>	<u>2846</u>
TOTAL	4217	159	4376

Distribution of students by classes and courses will be available on or about October 4.

MINUTES: GRADUATE COUNCIL

At its meeting on August 21 the Graduate Council took the following action:

1. Thirty-eight candidates were recommended for Master's degrees.
2. A proposal that a Ph.D. degree program in Civil Engineering be offered was approved to begin in February 1964.
3. A request from the Department of Mechanical Engineering that it be permitted to offer the Ph.D. degree in that area was also approved. The program will begin in September 1964. In considering each of these requests for new programs the Council discussed the growth and strength of the faculty in the department, the amount of research being done in the department, and the inclusion in the program of courses from outside the department.
4. Questions dealing with assignment of credit for directing theses, credit for seminars and research courses, and a common system of course numbering for seminars were discussed briefly and put on the agenda for the next meeting.

MINUTES: FACULTY SENATE OF CLEMSON COLLEGE

The eighty-ninth meeting of the Senate of the Academic Faculty of Clemson College was held on Tuesday, September 10, 1963 in the auditorium of Olin Hall with President J. G. Dinwiddie, Jr., presiding. Having a quorum present, the meeting was called to order, and the minutes for the May meeting were read and approved.

Professor W. B. Barlage, Chairman, reported for the Policy Committee the two major problems being considered by that committee. The problems under consideration are (1) A change in the by-laws which stipulates that "no member shall succeed himself", and (2) The merger of the Faculty Senate and Research Council. Professor Barlage went into the various aspects of these problems, emphasizing this was not any sort of recommendation to the Senate but just a report. The floor was then open to a free and general discussion on the subjects.

Professor W. G. Hudson, Chairman of the Welfare Committee reported that in compliance with the recommendation submitted to the Senate at the May meeting letters of inquiry had been sent to eight colleges about their policies in regard to compulsory attendance of faculty at commencement exercises. He also reported that the Committee had discussed at some length the subject of improvement of teaching at Clemson, but this was done in generalities but with no specific recommendation coming forthwith.

Professor A. H. Holt reported for the Committee on Admissions and Scholarships. This committee is working on ways to strengthen the counseling program, one method being that freshmen see their advisor at least three times during the first semester, and in case of noncompliance by any freshmen of this requirement, his advisor would send a card to the Dean of Student Affairs.

President Dinwiddie then reported the following:

- (1) That Professors M. A. Owings, L. H. Davis and himself are to serve on the Committee for Honorary Degrees. He asked for the faculty to recommend candidates and that the deadline date for such recommendations is October 15. Professor Owings requested that this request be put in the Newsletter.
- (2) That the Educational Council had approved the requirement of a 1.9 grade point ratio for graduation which will come into effect next year, going up to 2.0 by 1968.
- (3) That the annual Clemson-Carolina game will be on Thanksgiving week-end hereafter, therefore there will be no need for special holidays.
- (4) That the Educational Policy Committee meets here on September 17th. The full Board of Trustees will meet on October 4th.

There being no further business, the meeting was adjourned.

Respectfully submitted,

Members Absent:

Adkins, T. R.
Coolidge, H. N., Jr.
Fain, C. C.
Flatt, J. L.
Hubbard, J. C., Jr.
McHugh, C. M.
Watson, C. H.

Susan Brown
Secretary

PERSONAL MENTION

B. D. Cloaninger (Fertilizer Analysis) will be on the program of the NE Fertilizer Conference, October 10-11, at Pocono Manor, Pennsylvania.

G. H. Aull (Ag. Economics - ret.) and H. C. Spurlock (Ag. Economics) read papers at the August meeting of the American Farm Economic Association meeting at the University of Minnesota.

John Huffman (Chem.) will chair a natural products symposia at the November 14-16 meeting of the SE Regional Meeting of the American Chemical Society at Charlotte, N. C. P. E. Robbins (TC) will present a paper at the same meeting.

D. R. Gentry (TC) will present a paper at the fall meeting of the Textile Quality Control Association, October 4, in Charlotte, N. C.

Henry Perkins (TC) read a paper on September 20 at the Gulf Coast Section meeting of AATCC in New Orleans, La.

E. S. Olsen (TC) read a paper and chaired the technical session of the AATCC at its September 14 meeting in Augusta, Georgia. P. E. Robbins (TC) also presented a paper at this meeting. The paper read by Mr. Olsen was co-authored with Maurice Goldemberg (TC).

Fred Lindstrom (Chem.) and George Meenagham (Ch.E.) have been elected to membership on the Faculty Research Council, effective October 10.



C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 3 No. 2

October 15, 1963

CALENDAR: OCTOBER 18-NOVEMBER 4

- Oct. 16 W Newcomers Club, 8:00 p.m., Clemson House.
- Oct. 16 W Laicos Club, 8:15 p.m., Clemson House.
- Oct. 18-22 Exhibition: "Young American 1962." Two hundred examples of wall hangings and other textile, ceramic, metalwork and wood objects. Lobby, Architecture. Daily.
- Oct. 20 S Clemson's "College Bowl Team" will compete. NBC-TV will carry the program. Channel 4, 5:30 p.m.
- Oct. 22 T Dr. K. W. King (VPI) will speak on microvial degradation of cellulose. This is a Sigma Xi sponsored lecture. Earle Hall Auditorium, 8:00 p.m.
- Oct. 22 T Mr. Gaston Jennings (J. P. Stevens Co.) will speak on "Ethics in Business." Sirrine Auditorium, 11:00 a.m.
- Oct. 22 T Dr. Harry Walborsky (Florida State) will speak, Room 118, Brackett Hall, 4:00 p.m.
- Oct. 23 W Graduate Wives, 8:00 p.m., Clemson House
- Oct. 25 F Football: Clemson-USC freshmen, 2:00 p.m.
- Oct. 28 M Forum Club, 7:00 p.m., Chemistry Building Conference Room.
- Oct. 28 M Mr. Yates C. Smith (TVA) will speak on the role of TVA in fertilizer research. College auditorium, 11:00 a.m.
- Oct. 29 T Mrs. J. D. Mashburn (Deering Milliken Corp.) will speak on "Waste Utilization and Control." Sirrine Auditorium, 11:00 a.m.
- Oct. 30 W Mr. Robert E. Scott (Spencer Chemical Co.) will speak on "Marketing Agricultural Chemicals." Room A-203, P&AS, 11:00 a.m.
- Oct. 30 W Laicos Club, 8:15 p.m., Clemson House
- Oct. 31 Th Mr. A. B. Robertson (Crawford & Co.) will speak on "What Business Expects of the College Graduate." Sirrine Auditorium, 2:00 p.m.
- Nov. 1 F Concert by "The Highwaymen." YMCA, 8:00 p.m.

CALENDAR: (continued)

Nov. 1-21		Exhibition of English water colors and drawings of 18th and 19th centuries. Lobby, Architecture. Daily.
Nov. 2	S	Football: Clemson v. Wake Forest. 2:00 p.m.
Nov. 5	T	Sage Club, 6:30 p.m., Clemson House.
Nov. 7	Th	Woman's Club, 3:30 p.m., Clemson House Ballroom---Holiday Fashion Show.

NOTES ON OCTOBER MEETING OF BOARD OF TRUSTEES

The College Board of Trustees held its fall meeting at the Clemson House on October 4. The Board took these actions:

- (1) Confirmed the appointment of W. J. Lanham as head of the Department of Agricultural Economics and Rural Sociology.
- (2) Approved a recommendation to transfer the administration of metallurgical engineering from the chemical to the ceramic engineering department, effective February 1, 1964.
- (3) Approved the following policies and rules and regulations for women students:
 - (a) That, as a general policy, all undergraduate women be required to live in the women's dormitory, effective with the second semester of 1963-1964, with the Administration authorized to establish such rules and regulations as necessary to carry out this policy and provide for exceptions as illustrated above, and
 - (b) That the Administration be authorized to modify or establish such other rules and regulations concerning undergraduate women students as are deemed to be in the best interest of the institution and the students.
- (4) Approved a general policy related to living arrangements for undergraduate men students. The policy requires, with appropriate exceptions, that all undergraduate men students live in the dormitories. Those who are allowed to live elsewhere will reside in college-approved homes.
- (5) Approved a change of Mr. George Coakley's title from Assistant Dean of Students to Dean of Men.
- (6) Approved the administration's proposed budget request for 1964-1965.

NOTES ON OCTOBER MEETING OF BOARD OF TRUSTEES (continued)

- (7) Confirmed the granting of right-of-way easements to the Blue Ridge Electric Cooperative, the Duke Power Company, and the S. C. Highway department.
- (8) Established a \$5.50 per week summer sessions room rate for girls and increased the summer sessions medical fee for all students from 75¢ to 85¢ per week.
- (9) Approved a charge of \$25 to each graduate student receiving the Ph.D. degree so that the student's dissertation may be microfilmed by University Microfilms and the abstract published in Dissertation Abstracts.
- (10) Confirmed the appointment of the McPherson Company as architects for the addition to Brackett Hall. The firm of Craig and Gaulden will assist in the design phases.
- (11) Accepted as information reports of the Dean of the College, the Dean of Student Affairs, the division of Alumni and Public Relations, and Agricultural Regulatory Agencies.

LIBRARY MODEL ON DISPLAY

An architectural model of the new Library building showing its proposed location and external design is on display in the Library.

STUDENTS DISCHARGED TO DATE

The following students have been discharged since the opening of school:

<u>Name</u>	<u>Major Course</u>	<u>Effective Date</u>
Albertson, Robert Gerald	TM	October 9, 1963
Altoonian, John Wayne	ME	September 21, 1963
Anacker, Richard Lyle	Pre-Med	September 17, 1963
Boland, John Kenneth	For	September 30, 1963
Bowie, Philip A.	Arch	September 18, 1963
Burton, Donald Wayne	IM	September 11, 1963
Elliott, James Vernon	CE	October 10, 1963
Farnsworth, Clyde Houston, Jr.	(Grad)	October 9, 1963
Fleming, James H.	ME (PG)	September 23, 1963
Freeman, Danny Lee	Dy Sc	September 19, 1963
Hamilton, Stewart Lee	Arch	October 2, 1963
Harris, Emery Hooper	TC	October 10, 1963
Hudspeth, Jerry Webb	ME	September 18, 1963
Huff, Jonathan Oscar	IM	October 10, 1963
Janzen, Betty Lou	(Grad)	September 12, 1963
Jerald, Harry James	A&S	October 3, 1963
Johnson, Hubert Charles	ME	October 9, 1963
Jones, Brian Douglas	ChE	September 25, 1963
Kieffer, Leonard Paul	Arch	October 10, 1963
Langer, Robert Andrew	EE	September 13, 1963
Lawson, Donald Gene	IM	October 5, 1963
Mann, Linda Elledge	(Sp. -Staff)	September 18, 1963
Mell, Darrell Jon	A&S	September 11, 1963
Miller, David Victor	IM	September 14, 1963
Nesbitt, Raymond C.	IM	September 16, 1963
Nobles, Fred Edward, Jr.	IM	September 10, 1963
Price, Henry S., Jr.	A&S	September 28, 1963
Ratterree, Pride Coleman	WRE(Grad)	September 27, 1963
Reedhead, William A.	A&S	September 19, 1963
Russell, Robert Wick	Arch	October 2, 1963
Sowell, Wendell Ervin	For	September 23, 1963
Studniarz, Joseph J.	ME	September 17, 1963
Williams, James Howard	IM	September 20, 1963
Wolcken, Jon Peter	EE	September 16, 1963

ENROLLMENT BY COURSES AND SEMESTERS -- FIRST SEMESTER 1963-1964

Major Course	Freshman (Semester)		Sophomore (Semester)		Junior (Semester)		Senior (Semester)		Total
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	
Agriculture	8	1	0	0	0	0	0	0	9
Agricultural Economics	5	5	1	1	3	3	8	1	27
Agricultural Education	10	14	4	10	9	10	7	9	73
Agricultural Engineering	12	2	8	2	3	3	7	0	37
Agronomy	6	5	1	4	7	2	8	2	35
Animal Husbandry	8	7	4	2	3	2	4	4	34
Biocology	16	10	4	4	13	3	9	4	63
Botany Science	6	5	4	3	7	3	4	4	36
Entomology	2	0	0	0	1	0	1	0	4
Food Technology	0	4	3	0	1	0	0	0	8
Forestry	35	16	14	7	3	11	21	1	108
Horticulture	8	10	7	6	8	1	13	1	54
Poultry Science	1	1	2	1	0	1	1	1	8
Pre-Veterinary	30	8	14	5	2	0	0	0	59
Subtotal	147	88	66	45	60	39	83	27	555
Architecture	78	28	41	19	20	15	34*	8**	243
Building Construction	11	8	3	6	3	2	0	0	33
Subtotal	89	36	44	25	23	17	34	8	276
Applied Mathematics	24	7	20	4	6	4	6	2	73
Arts and Sciences	124	118	76	66	53	34	65	17	553
Biochemistry	17	3	10	2	1	3	13	0	49
Education	0	0	0	0	0	1	2	3	6
Physics	20	4	8	3	4	4	8	1	52
Pre-Medicine	88	23	30	8	17	6	20	1	193
Subtotal	273	155	144	83	81	52	114	24	926
Engineering	60	3	0	0	0	0	0	0	63
Ceramic Engineering	22	6	8	5	5	6	16	2	70
Chemical Engineering	64	20	36	10	19	9	30	0	188
Civil Engineering	96	31	45	21	34	17	34	9	287
Electrical Engineering	150	54	74	35	49	23	56	12	453
Industrial Education	2	3	1	6	5	4	6	2	29
Industrial Engineering	23	9	14	1	4	4	7	5	67
Mechanical Engineering	131	33	62	32	46	13	43	12	372
Metallurgical Engineering	2	0	3	0	0	0	0	0	5
Subtotal	550	159	243	110	162	76	192	42	1534
Industrial Management	114	106	50	62	41	42	78	15	508
Textile Chemistry	15	4	9	1	8	3	9	6	55
Textile Management	30	30	15	22	25	19	44	11	196
Textile Science	8	4	4	0	1	2	6	2	27
Subtotal	167	144	78	85	75	66	137	34	786
Total	1226	582	575	348	401	250	560	135	4077***
Graduates					Part-Time		Full-Time		
Postgraduates					114		146		260
Unclassified					7		9		16
Total					20		3		23
Grand Total					141		158		299
									4376

* Includes eight who are in the first semester of the fifth year.

** Includes six who are in the second semester of the fifth year.

*** Includes forty-nine part-time undergraduate students.

BACHELORS' DEGREES AWARDED IN 1963 BY MAJOR COURSES

School of Agriculture		118
Agricultural Economics	13	
Agricultural Education	31	
Agronomy	3	
Animal Science	15	
Biology	9	
Dairy Science	4	
Entomology	3	
Forestry	24	
Horticulture	14	
Poultry Science	2	
School of Architecture		11
Architecture	11	
School of Arts and Sciences		122
Applied Mathematics	7	
Arts and Sciences	63	
Chemistry	8	
Education	13	
Physics	12	
Pre-Medicine	19	
School of Engineering		208
Agricultural Engineering	8	
Ceramic Engineering	14	
Chemical Engineering	20	
Civil Engineering	31	
Electrical Engineering	60	
Industrial Education	10	
Industrial Engineering	13	
Mechanical Engineering	52	
School of Industrial Management and Textile Science		175
Industrial Management	118	
Textile Chemistry	8	
Textile Management	43	
Textile Science	6	
Total Bachelors' Degrees Awarded in 1963		634

MASTERS' DEGREES AWARDED IN 1963 BY MAJOR COURSES

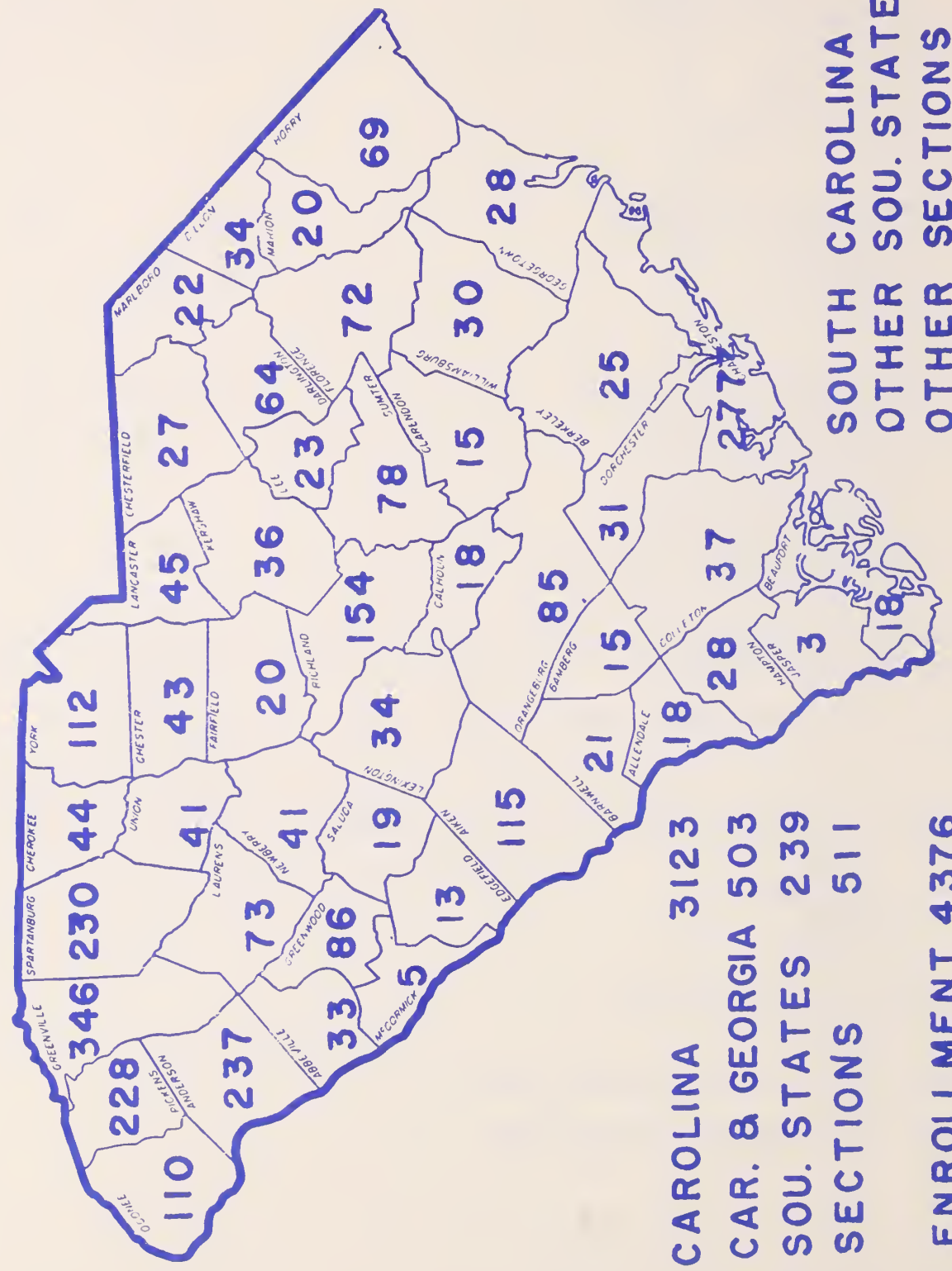
School of Agriculture		18
Agricultural Economics	2	
Agricultural Education	3	
Agronomy	1	
Entomology	4	
Horticulture	4	
Poultry Science	2	
Zoology	2	
School of Arts and Sciences		38
Chemistry	7	
Education	21	
Mathematics	9	
Physics	1	
School of Engineering		26
Agricultural Engineering	5	
Ceramic Engineering	7	
Chemical Engineering	4	
Civil Engineering	1	
Electrical Engineering	3	
Industrial Education	2	
Mechanical Engineering	1	
Water Resources Engineering	3	
School of Industrial Management and Textile Science		2
Textile Chemistry	2	
Total Masters' Degrees Awarded in 1963		84

DOCTORS' DEGREES AWARDED IN 1963 BY MAJOR COURSES

School of Agriculture		3
Agronomy	2	
Entomology	1	
School of Arts and Sciences		2
Chemistry	2	
Total Doctors' Degrees Awarded in 1963		5
Total Number Degrees Awarded in 1963		723

WHERE THE CLEMSON STUDENTS COME FROM

FIRST SEMESTER 1963 - 1964



SOUTH CAROLINA 3123
 NORTH CAR. & GEORGIA 503
 OTHER SOU. STATES 239
 OTHER SECTIONS 511
 TOTAL ENROLLMENT 4376

SOUTH CAROLINA 71.4
 OTHER SOU. STATES 16.9
 OTHER SECTIONS 11.7

PERSONAL MENTION

Leonard R. Allen (Extension) has been granted leave to do graduate study at Auburn University.

C. E. Littlejohn (Ch.E.) has been notified that ECPD has extended accreditation to chemical engineering for an additional year.

R. Henningson (Dairy Science) presented a paper on cryoscopy at the A.D.A.C. meeting in Washington on October 15.

F. Lindstrom and B. G. Stephens (Chem.) have been recognized in the Analyst by the General Chemical Company Limited for having introduced Magnesium Iodate Tetrahydrate.

J. H. Moore (C.E.) has been notified by the S. C. Association of County Road Officials that the Association will offer a \$500 scholarship to an undergraduate in C.E., effective this year.

J. W. Huffman (Chem.) has been awarded an \$8040 research grant by the NIH (National Advisory Heart Council) for work on "A Synthetic Approach to the Furanoquinoline Alkaloids.

J. B. Pitner (Agron.), R. L. Edwards (An.Sci.) and A. L. Shewfelt (Food Tech.) have been elected to terms on the Research Faculty Council.





C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 3 No. 3

CLEMSON COLLEGE LIBRARY
SPECIAL COLLECTION

November 1, 1963

CALENDAR: OCTOBER 31-NOVEMBER 17

- Oct. 31 Th Winthrop Daughters will meet at 8:00 p.m. at the home of Mrs. W. M. Epps, with co-hostesses, Mrs. L. D. Malphrus and Mrs. S. C. Stribling. All former Winthrop students are invited in this area.
- Oct. 31 Th Mr. A. B. Robertson, President, Crawford and Co., will speak on "What Business Expects of the College Graduate," 2:00 p.m., Sirrine Auditorium.
- Nov. 2 S High School Student Visitation Day, 9:00 a.m., Tillman Hall.
- Nov. 2 S Football: Clemson v. Wake Forest, 2:00 p.m.
- Nov. 4 M Alexander Styne, A.I.D., Industrial Designer of Miami, Florida, will speak on "The Design of Interiors," 8:00 p.m., Auditorium, School of Architecture, sponsored by the "Clemson Architectural Foundation."
- Nov. 5 T Sage Club, 6:30 p.m., Clemson House.
- Nov. 5 T Dr. McDonald K. Horne, Jr., Chief Economist, National Cotton Council, Memphis, Tennessee, will speak on "Evaluation of Domestic and Foreign Markets for U. S. Cotton," 3:00 p.m., P & AS Auditorium.
- Nov. 6 W Newcomers Club, 8:00 p.m., Clemson House
- Nov. 6 W Laicos Club, 8:15 p.m., Clemson House
- Nov. 7 Th Woman's Club, 3:30 p.m., Clemson House Ballroom---Holiday Fashion Show.
- Nov. 7 Th Lt. Boris Orlowsky, 6555 Aerospace Test Wing, Patrick AFB, Florida, will speak on "Air Force Systems Command," 4:00 p.m., Main Auditorium, Tillman Hall.
- Nov. 2-21 Exhibition of ENGLISH WATER COLORS AND DRAWINGS OF THE 18th & 19th CENTURIES. This exhibition of 60 watercolors and drawings by 40 outstanding British artists spans two hundred years of landscape painting. The older group of artists represented includes John Constable, the Cozens, Girtin, Grimm, as well as 19th century artists, Cox, DeWint, Palmer, Turner, and Varley. Lee Gallery, School of Architecture.

CALENDAR: (continued)

Nov. 5 T State cross-country meet at Greenville.

Nov. 7-8 Th-F 7th Pest Control Operator's School. Long Hall

Nov. 11 M Forum Club, 7:00 p.m., Chemistry Building, Conference Room.

Nov. 11 M Robert F. Hastings, F.A.I.A., President of Smith, Hinchman and Grylls, Architects of Detroit and National Treasurer A.I.A., will speak on "Expanding Arch'l Services," 8:00 p.m., Auditorium, School of Architecture, sponsored by "Clemson Architectural Foundation."

Nov. 12 T Graduate Wives, 8:00 p.m., Clemson House.

Nov. 12 T Henry W. Morgan, Oak Ridge National Laboratory, will speak on "The Optical Maser (with demonstrations)." 7:00 p.m., Room 100, Earle Hall.

Nov. 12 T Dr. S. W. Pelletier, Head, Department of Chemistry, University of Georgia, will be the Seminar speaker, 4:00 p.m., Room 118, Brackett Hall.

Nov. 12 T Mr. Weddie W. Huffman, Industrial Relations Manager, Burlington Industries, Inc., will speak on "Community and Employee Relations," 11:00 a.m., Auditorium, Sirrine Hall.

Nov. 13 W Concert: Mantovani and Orchestra. 8:00 p.m., Field House.

Nov. 15-16 F-S Homecoming Dances.

Nov. 16 S Football: Clemson v. Maryland, 2:00 p.m., Homecoming Game.

MINUTES: THE FACULTY SENATE OF CLEMSON COLLEGE

The ninetieth meeting of the Senate of the Academic Faculty of Clemson College was held on Tuesday, October 8, 1963, in the auditorium of Olin Hall with President J. G. Dinwiddie, Jr., presiding. Having a quorum present, the meeting was called to order, and the reading of the minutes was dispensed with.

Professor W. B. Barlage, Chairman, reported for the Policy Committee on the problem of changing or clarifying the by-law which reads, "no member shall succeed himself." The committee made the following recommendation in the form of a motion: (1) that the President of the Senate is to prepare an ineligible list to be presented to the Senate for approval, and (2) that the approved list is then to be sent to the Dean of the College who, in turn, is to send the list to all the deans of the various schools. The motion was seconded and the floor was open to discussion. A motion was made that the stipulation that the President submit the list at the April meeting of the Senate be included in the recommendation. This motion was seconded. The recommendation was then voted on and passed.

MINUTES: THE FACULTY SENATE OF CLEMSON COLLEGE (continued)

Professor W. G. Hudson, Chairman of the Welfare Committee, reported on the problem of compulsory attendance of faculty members at commencement exercises. He reported the committee had received ten replies to its letters of inquiry to various colleges regarding their policies in this area. He gave the Senate a brief resume of each college's policy. The outcome of the report was, with the exception of one, all had some form of compulsory attendance policy, either implied or explicit. Professor Hudson then submitted the committee's recommendation, modifying the present policy by requiring participation of fifty percent of the faculty with the rank above instructor on a rotational basis.

Professor Hudson moved that this recommendation be put on the calendar for consideration at the next regular meeting of the Senate. The motion was seconded and the floor was then open to discussion. After a lengthy and spirited debate, the motion was voted on and passed.

President Dinwiddie then read a letter from Dean Cox expressing his appreciation to Professor Campbell and Committee on Admissions and Scholarship for their assistance in planning the new student orientation program.

President Dinwiddie then announced that Professor C. C. Fain is serving as faculty representative on the Committee on Traffic and Parking.

President Dinwiddie announced that the retirement policy was not brought to the Board's attention in October. Dean Williams gave oral reasons for this and President Dinwiddie stated he preferred not to report on the reasons for this at this time, inasmuch as he had requested a written letter stating the Administration's thinking in this area. He stated he would report on this at the next meeting after receipt of such letter.

President Dinwiddie reported he had the Faculty Salary Report which had been prepared upon request of AAUP. Professor L. E. Hill moved that it be sent to AAUP. The motion was seconded and there being no discussion, it was voted on and passed.

Professor L. E. Hill introduced a resolution with regard to faculty members going abroad on leave without pay. The recommendation provided that the difference between the replacement's salary and the faculty member involved be awarded to the faculty member. This resolution was given to the Welfare Committee for study.

There being no further business, the meeting was adjourned.

Respectfully submitted,

Members Absent:

Caskey, C. O.
Davis, L. H.
Hunter, R. H.
McCormac, J. C.
McGee, C. M.

Susan Brown, Secretary

COMMENTS ON GRADUATE SCHOOL ENROLLMENT

Enrollment in the Graduate School rose by 35 per cent over the first semester of last year. This compares with an increase of 10 per cent in 1961 over 1960 and of 20 per cent in 1962 over 1961. In actual numbers enrollments increased from 191 in September 1962 to 258 in September 1963. Enrollments increased in all five schools, and in no school was the increase less than 15 per cent.

Three important trends should be noted: (1) enrollments in agriculture which had been declining from 1958 to 1961, having fallen from 69 to 49, have risen in the last two years and have now returned to the 1958 level. (2) Enrollment in engineering which had remained almost constant from 1957 to 1960 has more than tripled in the last three years. There are 74 students enrolled in engineering this fall versus 22 enrolled in 1960. (3) The rising trend in enrollments in the natural sciences of chemistry, mathematics, and physics, which was temporarily interrupted last year, has now resumed. Enrollment in these three areas went up by 40 per cent this year.

The students just entering this semester received their undergraduate degrees from 59 institutions located in 23 states and five foreign countries. Thirty-three per cent of the new students hold the baccalaureate degree from Clemson.

These rising enrollments have not come at the sacrifice of quality. Each student admitted to Clemson Graduate School is required to take the Graduate Record Aptitude Test. Since graduate programs at Clemson are concentrated in the biological, physical, and engineering sciences, it is felt that the quantitative aptitude show on this test is an important measure of the student's ability to do graduate work successfully. Two years ago in 1961, 42 per cent of the students admitted to the Graduate School at that time had scores on the quantitative aptitude portion of this examination which placed them among the top 10 per cent of all students nationally. Eighty-six per cent of the new students that year had scores that placed them in the top 30 per cent nationally. This year out of the 107 students who were admitted, 45 per cent had scores that placed them in the top 10 per cent nationally and 84 per cent have scores that place them in the top 30 per cent.

The quality of students enrolled can be measured also by the number of students enrolled in doctoral programs. In the academic year 1959-60, only one student was enrolled in a doctoral program at Clemson. By the fall of 1962, 37 students were enrolled in eight doctoral programs, and this fall there are over 50 students enrolled in 10 programs.

Graduate School Enrollments by Semesters

	<u>1957-58</u>	<u>1958-59</u>	<u>1959-60</u>	<u>1960-61</u>	<u>1961-62*</u>	<u>1962-63</u>	<u>1963-64</u>
<u>Agriculture</u>							
Agricultural Economics	17	20	16	12	12	12	7
Agricultural Education	15	29	15	15	9	8	3
Agronomy	4	6	4	7	8	12	8
Animal Husbandry	3	7	5	6	5	3	2
Bacteriology							4
Dairy	2	3	4	2	1	2	4
Entomology	10	9	16	4	4	10	13
Horticulture	2	2	4	9	11	7	10
Plant Pathology	5	5	5	3	9	5	6
Poultry							4
Zoology	4	5		3	8	5	4
Total Agriculture	62	86	69	63	65	54	68
<u>Arts & Sciences</u>							
Chemistry	17	18	16	15	22	25	41
Economics					21	29	1
Education	5	15	17	19	18	12	9
English							2
Mathematics	5	6	5	8	5	3	17
Physics			11	4	13	10	20
Nuclear Science					7	2	
Total Arts & Sciences	27	39	49	46	52	56	90
<u>Engineering</u>							
Agricultural Engineering	9	9	8	6	8	5	6
Ceramic Engineering	2	1	3	3	3	4	8
Chemical Engineering							15
Civil Engineering			1	1		1	7
Electrical Engineering	5	6	4	6	4	1	6
Industrial Education							2
Mechanical Engineering	5	5	4	6	6	6	15
Water Resources Engineering					7		13
Materials Engineering					8	2	1
Total Engineering	21	21	20	22	21	18	73
<u>Ind. Mgt & Text. Science</u>							
Textile Chemistry	3	3	4	2	4	6	8
Industrial Management							6
Total IM & TS	3	3	4	2	4	6	14
<u>Architecture</u>							
Unclassified	2	3	7	12	4	1	1
TOTAL ENROLLMENTS	115	152	149	145	146	130	258

MINUTES: RESEARCH FACULTY COUNCIL MEETING

The first meeting of the Research Faculty Council for the year was held on October 10, 1963. At this meeting R. W. Henningson welcomed the newly elected council members, officers were elected for the coming year and some planning for the year's work was accomplished.

The newly elected council members are R. L. Edwards and A. L. Shewfelt of the School of Agriculture, J. B. Pitner of the Pee Dee Experiment Station, G. F. Meenaghan of Engineering, F. J. Lindstrom of Arts and Sciences, and E. S. Olson, I.M. & T.S.

Those elected to serve as officers for 1963-64 are Chairman, C. E. Bardsley; Vice-Chairman, R. L. Edwards; and Secretary, A. C. Elrod.

There were no committee reports as no committee assignments were continued through the summer. Work contemplated for the new year includes studies of the annual leave policy, the outside work policy and of the possibility of establishing a graduate faculty.

Respectfully submitted,

A. C. Elrod, Secretary

Members Absent:

G. F. Meenaghan

F. J. Lindstrom

M. J. Skove

STUDENTS DISCHARGED

The following students have been discharged since the last list was issued on October 10, 1963:

<u>Name</u>	<u>Major Course</u>	<u>Effective Date</u>
Blair, James Carrol	ME	October 21, 1963
Boylston, Ronald Lee	IM	October 24, 1963
Brown, David Joe	A&S	October 21, 1963
Florey, Bettye Finklea	A&S	October 23, 1963
Fox, James Edward	EE	October 18, 1963
Gravely, Cynthia Ranson	(GRAD)	October 8, 1963
Gunnin, Emery Aaron, Jr.	EE	October 9, 1963
Lacey, Ronald Nelson	EE	October 18, 1963
McClain, George Albert	A&S	October 17, 1963
McDonald, Fletcher Alexander	CE	October 22, 1963
Moore, Gary Hix	A&S	October 14, 1963
Olivarri, Clayton Neil	E	October 16, 1963
Smith, Richard Lee	ChE	October 22, 1963
Turner, George William	TM	October 7, 1963
Turner, Mary Lynn	A&S	October 19, 1963
White, William Gerald	IM	October 15, 1963

TITLE CHANGES IN EXTENSION

Several members of the Agricultural Extension Service have had their titles changed, effective November 1. They are:

J. W. Hooks from "Agronomist-Conservation" to "Associate Extension Agronomist."

O. W. Lloyd from "Rural Development Specialist" to "Community and Rural Development Specialist."

M. H. Sutherland from "Assistant in Farm and Home Development" to "Farm and Home Development Specialist."

J. E. Youngblood from "Chief, Extension Division of Marketing" to "Leader, Extension Marketing Work."

PERSONAL MENTION

Morris Cox (English) has been notified that Mrs. Dorothy Dunkelberg, a graduate student, has been awarded a \$500 AAUW Fellowship, plus tuition and book fees.

Max Miller (Physics) has been awarded an Air Force research grant for \$36,014. The research project is "A Study of the Dislocation Multiplication Process in AgCl."

Jane G. Lease (Food Tech.) has been awarded a \$43,308 research contract by the National Institutes of Health (Arthritis and Metabolic Diseases Council) for a study of zinc metabolism.

W. C. Whitten (Economics) will be a panelist at the Roanoke, Virginia meeting of the Southern Economic Association, November 14-16.

Davis McGregor (Forestry) is the co-author of an article in the American Journal of Botany, Vol. L., No. 8, September 1963.

E. Laitala (IE) read a paper recently before the Augusta, Georgia Chapter of the American Institute of Industrial Engineers.



C L E M S O N

CLEMSON COLLEGE LIBRARY
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Newsletter

NOT FOR PUBLICATION

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

Vol. 3 No. 4

November 15, 1963

CALENDAR: NOVEMBER 17-DECEMBER 3

- Nov. 17-21 Exhibition of English water colors and drawings of the 18th & 19th centuries. This exhibition of 60 water colors and drawings by 40 outstanding British artists spans two hundred years of landscape painting. The older group of artists represented includes John Constable, the Cozens, Girtin, Grimm, as well as 19th century artists, Cox, DeWint, Palmer, Turner, and Varley. Lee Gallery, School of Architecture.
- Nov. 18 M Dr. Henry Leidheiser, Jr. of the Virginia Research Institute will speak on "Key Problems and Recent Advances in the Field of Surface Chemistry." This will be at 8:00 p.m., Room 1, Brackett Hall, and is a regular meeting of the Western Carolinas Section of the American Chemical Society.
- Nov. 19 T Sage Club, 6:30 p.m., Clemson House.
- Nov. 19 T Dr. G. W. Pearce, Public Health Service, will speak. 4:00 p.m., Room 118, Brackett Hall.
- Nov. 19 T Mr. E. W. Marshall, Personnel & Safety Director, Reeves Brothers, Inc., will speak on "Government Agencies and the Mills." 11:00 a.m., Auditorium, Sirrine Hall.
- Nov. 20 W Laicos, 8:15 p.m., Clemson House.
- Nov. 20 W Newcomers, 8:00 p.m., Clemson House.
- Nov. 20 W Concert: Black Watch Band, Dancers and Pipers, Fieldhouse, 8:00 p.m.
- Nov. 21 Th Dr. Daniel W. Hollis, Professor of History, University of South Carolina, will speak to the Social Sciences Seminar on "Ben Tillman and Higher Education in South Carolina." 4:00 p.m., Olin Hall Auditorium.
- Nov. 21 Th Dr. Alfred Lande, Professor of Physics, Ohio State University, will give a public lecture on "Causality and Chance in Modern Physics." 8:00 p.m., 101 Physics.
- Nov. 23 S Football: Clemson v. Carolina -- classes suspended.
- Nov. 25 M Forum Club, 7:00 p.m., Chemistry Building Conference Room.
- Nov. 26 T Mr. L. E. Rasmussen, DuPont Co., will speak on "Information Retrieval." 7:00 p.m., Room 100, Earle Hall.

CALENDAR: (continued)

- Nov. 26 T Mr. Jim Elmore, Personnel Manager, Southern Plant, Albany Felt Co., will speak on "Industrial Fabrics." 11:00 a.m., Auditorium, Sirrine Hall.
- Nov. 27 W Graduate Wives, 8:00 p.m., Clemson House.
- Nov. 28-Dec.18 Exhibition of landscape architecture. Examples include recent designs for residences, churches, schools and museums. Among landscape architects represented are Bye and Hermann, Pachall Campbell, Clarke and Rapuano. Lee Gallery, School of Architecture.
- Nov. 28-30 Thanksgiving holidays.
- Dec. 2 M Dr. Sidney W. Fox, Institute for Space Biosciences, Florida State University, will give a public lecture presented by the School of Agriculture on "Theories of the Origins of Life." 8:00 p.m., Chemistry Auditorium.
- Dec. 3 T Basketball: Clemson v. UNC, 8:00 p.m.

POST DOCTORAL RESEARCH FELLOW IN CHEMISTRY

C. B. S. Rao, a native of India and a doctoral graduate of Andhra University, India, will join the Department of Chemistry in December as a post-doctoral fellow. Dr. Rao is currently doing post-doctoral research at the University of Texas.

BOAT GIVEN TO ALUMNI ASSOCIATION

The Tiger Oil and Boat Company of Clemson, Hercules Distributing Company of New Ellenton, South Carolina and Glassmaster Boat Company of Columbia have made available a 15-foot Glassmaster Boat and 40 HP Johnson Seahorse motor to the Clemson Alumni Association as an "official use" craft for Clemson College.

The boat is available on appointment for any use that may be advantageous to the College. It may be used for the entertainment of official visitors, prospective staff members, etc. The boat will be docked at Joe Sherman's residence, 401 Oak St.

A "ship's log" will be maintained in the Alumni Office. If you wish to use the boat, please call Mr. George Moore in this office. We will appreciate as much advance notice as you can give---but please do not hesitate to call in a "this afternoon" request if need be.

GE SCHOLARSHIP AWARD

C. Waldron Bolen (history) has been advised by the General Electric Company that \$500 has been added by the company to the Clemson College scholarship fund. Criteria for awarding the scholarship will be announced by the college scholarship committee. The award came to Clemson as a result of our participation in the G.E. College Bowl. Dr. Bolen was head coach of the Clemson team.

DR. SHELDON TO RELINQUISH DEPARTMENT CHAIRMANSHIP

Dawson Sheldon, Head of the Department of Mathematics, plans to relinquish his post in July in order to return to full time teaching. His successor as department head will be Clayton Aucoin who joined the staff in September following 11 years of teaching and research experience at Auburn University, Stanford University, and the University of Southwestern Louisiana in addition to some time in the aircraft industry as an applied mathematician.

Dr. Sheldon became department head in 1945. At that time the department consisted of only 18 teachers. This number has grown to 27 plus 13 graduate assistants. Last year (academic 1962-63), 4965 grades were posted in mathematics.

Dr. Sheldon was instrumental in building the undergraduate applied mathematics curriculum at Clemson. Seventy-three students are currently enrolled as majors in this area. The masters program in applied mathematics was also started by Dr. Sheldon, and 15 masters degrees have been awarded since the program began in 1958.

In recognition of his long service, Dr. Sheldon's title after July 1, will be Senior Professor of Mathematics.

A NOTE ON "THE AUDIT"

Newspaper accounts of the recent audit of Clemson have left impressions that something is amiss. The best answer to questions about the audit is found in the November 11 issue of the "Columbia Newsletter," published in Columbia by and for the membership of the South Carolina Textile Manufacturers Association. This material is not for publication by the press or others.

The newsletter quote is:

"Clemson's Clean Bill---Although some news accounts reported jointly on the findings of the independent auditors at the University of South Carolina and Clemson College, it was immediately pointed out that none of the critical areas of the audit reported reflected on Clemson---It was described as a coincidence that both reports were released on the same day---Actually, the independent auditors listed "violations" of seven sections of the 1962-63 appropriations in the case of the University but no violations were charged to Clemson---This was directed to attention when in some news accounts the audit reports were published jointly."

FOOD TECHNOLOGY AND NUTRITION SEMINAR

Dr. Sidney W. Fox of the Institute for Space Biosciences of the Florida State University will conduct an informal seminar on December 2, from 4:00-5:00 p.m., Room A204, Plant & Animal Science Building. Dr. Fox will be at Clemson under sponsorship of the School of Agriculture and the College Lecture Committee.

S.C.E.A. MEMBERSHIP DRIVE

The Clemson College members of the South Carolina Employees Association Board of Directors call attention to the current membership drive. The S.C.E.A. is the recognized voice of all state employees. To remain in its authoritative position, the Association needs the support (through membership) of every Clemson employee. Membership applications are being mailed and can also be obtained by contacting one of the following board members: John Gentry, Bob Banister or Tom Efland. Complete information about the Association and its benefits can be obtained from the Personnel Office, Extension 365.

CURRICULUM COMMITTEE HIGHLIGHTS

The several school curriculum committees, the College Curriculum Committee, and the Educational Council have approved extensive curriculum revisions in pre-veterinary medicine, poultry science, food technology, dairy science, mathematics, physics, industrial management and each degree-granting undergraduate engineering program. Many courses have been renumbered and others have been voided. A few new courses have been added. The revised curricula will be effective in September, 1964, and will be carried in full in the new edition of the College Catalog, soon to be printed.

New courses of possible general interest include:

Ag Ec 402, Economics of Agricultural Production, 3 cr. (3.0).

Math 417, Mathematics Programs, 3 cr. (3.0), a course for students in the math teacher-training program.

Econ 309, Government and Business, 3 cr. (3.0).

Soc 409, Selected Topics in Sociology, 3 cr. (3.0).

Accounting 301, 302, Intermediate Accounting, 3 cr. each (3.0).

New degree-granting programs approved include:

(a) A four year curriculum in Medical Technology, leading to the B.S. degree. The student will spend his first three years at Clemson, his fourth year at the Greenville General Hospital where he will take classes under the supervision of instructor there. These instructors will be listed as lecturers on the Clemson Faculty.

(b) A major and a minor in chemistry, leading to the B.A. degree.

(c) A new B.S. degree curriculum, designed for prospective teachers of high school mathematics.

(d) Programs in Civil Engineering and Mechanical Engineering leading to the Ph.D. degree in each area.

Complete details of all curriculum changes and program additions may be obtained from the Dean of the College, the Director of Admissions, school deans and appropriate department heads.

LECTURERS FOR MEDICAL TECHNOLOGY PROGRAM

Five members of the Greenville General Hospital Staff will affiliate with the Clemson Faculty in February as lecturers in Medical Technology. An additional member of the hospital staff will act as an instructional assistant for the program.

The five lecturers are:

--Erving Arthur Dreskin of Newark, N. J. and Greenville. His B. S. and M. D. degrees are from Tulane University. From 1946 to 1950 he taught in the Department of Pathology, University of Illinois College of Medicine and since 1950 he has been pathologist at Greenville General Hospital. During 1949-1950 he held an American Cancer Society fellowship in Oncology. Dr. Dreskin has been secretary and vice president of the American Association of Blood Banks, president of the S. C. Society of Pathologists, S. C. Assembly member for the College of American Pathology, and S. C. Councillor for the American Society of Clinical Pathology. He is a member of Alpha Omega Alpha, and of numerous professional medical groups. He is married to the former Jeanet Inman Steckler, and they have four children.

--Donald Gibson Kilgore, Jr., of Dallas, Texas and Greenville. He studied pre-medicine at S.M.U. and has his M.D. from the University of Texas Medical College. He completed a post graduate course in radioisotopes at Emory University Medical School in 1959 and is an AEC licensee. He was a resident in Pathology at the Charity Hospital of Louisiana (New Orleans) where he served as Assistant Pathologist from 1952 through 1954. He has also served as Assistant in Pathology at the LSU and Tulane Medical schools, and during 1962 was lecturer at the University of South Carolina. He is presently Chairman, Department of Pathology, at Greenville General Hospital. Dr. Kilgore holds membership in Phi Eta Sigma, Phi Chi, and numerous professional associations. He is married to the former Jean Upchurch Augur, and they have four sons.

--Bernhard Ludvigsen of Copenhagen, Denmark and Greenville. He attended the Danish Army College and the University of Copenhagen. He graduated as Magister Scientiarum from the University and has done postgraduate work in isotope techniques, neurophysiology, biometrics, protein chemistry, erythrocyte chemistry and enzymology. Since 1952 he has served as assistant manager of the Medicinsk Laboratorium; lecturer at the University of Saskatchewan; head of the Muscular Dystrophy Laboratory, University of Alberta Hospital; and head of the Chemistry Department, Greenville General Hospital. Mr. Ludvigsen is the author of a number of articles dealing with his extensive research in muscular dystrophy and enzymology. He is married to the former Ellen Krogh and they have two children.

--Glenn Edward Pottz of Nowata, Oklahoma and Greenville. He holds B.S., M.A. and M.S. degrees from the University of Oklahoma and has done additional graduate study in biochemistry and bacteriology at Southwestern Louisiana University and the University of Colorado. His teaching experience includes service in Oklahoma public school, Wewoka (Oklahoma) Junior College, SW Louisiana Institute, and the University of Colorado. He has been on the Greenville General Hospital staff since 1960. He is the author of nine publications on various phases of biochemistry. Mr. Pottz is a member of Phi Theta Kappa, Phi Delta Kappa, Phi Sigma, Sigma Xi and professional associations in botany and

--Washington Marion Waters III of Florence and Greenville, S. C. He holds the B.S. degree from Furman and the M.D. from the Medical College of S.C. He was a resident and teaching fellow at the U.N.C. School of Medicine and has been on the staff at Greenville General since 1957. Dr. Waters is a member of several professional associations. He is married to the former Virginia Carolyn Steele and they have two children.

The instructional assistant for the medical technology program (senior year) will be Patricia Forrester Thompson of Greenville. Mrs. Thompson holds the B.S. from Furman. Prior to joining the Pathology staff at Greenville General she served as medical technologist at St. Francis Hospital and the Donaldson Air Force Base. She is married to John Fred Thompson and they have two children.

STUDENTS DISCHARGED SINCE OCTOBER 24

The following students have been discharged since the last list was issued on October 24, 1963:

<u>Name</u>	<u>Major Course</u>	<u>Effective Date</u>
Bowers, Richard Butler, Jr.	TM	November 1, 1963
Boyd, Herbert Eugene, Jr.	CrE	October 29, 1963
Burnett, Jackson Wilbur	ME	October 31, 1963
Copeland, Jimmy B.	Grad-Uncl	September 20, 1963
Evatt, Calvin Lawrence	IM	October 31, 1963
Garrett, Frank Marion, Jr.	A&S	October 28, 1963
Hammett, Thomas Bennett, Jr.	TC	October 25, 1963
Holmes, Stewart M.	A&S	October 26, 1963
Hughes, Charles Eldridge, Jr.	For	October 28, 1963
Hursey, Martin E.	IM	October 22, 1963
Lawson, David Clayton	A&S	November 4, 1963
Leftwich, William Mewborn	ME	October 28, 1963
Liberty, John Edward	A&S	November 5, 1963
McLeod, Jacob Lawson	AgEc	October 28, 1963
Manes, John Peter	IM	October 29, 1963
Moore, Bruce Allen	Grad-Ent	October 29, 1963
Newton, Robert Park III	ME	October 31, 1963
Ponder, Johnny Ray	IM	November 6, 1963
Ruffner, James E.	A&S	October 28, 1963
Service, Charles G.	Phys	October 21, 1963
Smith, Reginald Earl	EE	November 6, 1963
Spake, Timothy Ralph	TM	October 28, 1963
Stephens, Llewellyn Richard	Arch	October 25, 1963
Stone, Burdette W.	ME	October 25, 1963
Till, Frankie Bruce	A&S	October 30, 1963
Tolzmann, Theodore Norman	ME	November 4, 1963

COURSE PREFERENCE OF NEW STUDENTS ON FILE FOR ENTRANCE IN JUNE AND SEPTEMBER 1964

<u>Major Course</u>	<u>Girls</u>	<u>Boys</u>	<u>Total</u>
Agriculture	0	15	15
Agricultural Economics	0	6	6
Agricultural Engineering	0	3	3
Agricultural Education	0	2	2
Agronomy	0	2	2
Animal Science	0	3	3
Biology	4	7	11
Dairy Science	0	0	0
Entomology	0	1	1
Food Technology	0	0	0
Forestry	0	26	26
Horticulture	2	1	3
Poultry Science	0	0	0
Pre-Veterinary	<u>1</u>	<u>11</u>	<u>12</u>
Total	7	77	84
Architecture	6	96	102
Building Construction	<u>0</u>	<u>3</u>	<u>3</u>
Total	6	99	105
Applied Mathematics	9	30	39
Arts & Sciences	18	47	65
Chemistry	5	17	22
Physics	1	14	15
Pre-Medicine	<u>10</u>	<u>54</u>	<u>64</u>
Total	43	162	205
Engineering	0	97	97
Ceramic Engineering	1	3	4
Chemical Engineering	1	30	31
Civil Engineering	1	31	32
Electrical Engineering	1	61	62
Industrial Education	0	1	1
Industrial Engineering	0	5	5
Mechanical Engineering	0	47	47
Metallurgical Engineering	<u>0</u>	<u>1</u>	<u>1</u>
Total	4	276	280
Industrial Management	0	35	35
Textiles	0	4	4
Textile Chemistry	0	4	4
Textile Management	0	8	8
Textile Science	<u>0</u>	<u>3</u>	<u>3</u>
Total	0	54	54
Total expressing major Course choice	60	668	728
Undecided	5	31	36
GRAND TOTAL	65	699	764

GRADE-POINT RATIO OF GRADUATES OF 1959, 1960, 1961, 1962 and 1963

(Grade-point ratios are based upon all scholastic work taken at Clemson. A grade-point ratio of 4.00 indicates an average of A; 3.00, B; 2.00, C; 1.00, D.)

Cumulative Grade-Point Ratios	Graduates of the Calendar Years Indicated				
	1959	1960	1961	1962	1963
4.00	1	0	0	0	0
3.80-3.99	4	3	6	3	5
3.60-3.79	5	6	5	8	6
3.40-3.59	14	14	14	16	14
3.20-3.39	24	12	12	12	22
3.00-3.19	32	22	22	27	24
2.80-2.99	35	28	31	22	18
2.60-2.79	40	38	42	36	40
2.40-2.59	63	57	50	68	55
2.20-2.39	70	77	68	90	98
2.00-2.19	67	82	106	108	127
1.80-1.99	85	125	164	186	225
1.60-1.79	91	16	0	0	0
1.40-1.59	3	3	0	0	0
1.20-1.39	1	1	0	0	0
1.00-1.19	0	0	0	0	0
0.80-0.99	0	0	0	0	0
0.60-0.79	0	0	0	0	0
0.40-0.59	0	0	0	0	0
0.20-0.39	0	0	0	0	0
0.00-0.19	0	0	0	0	0
TOTAL	535	484	520	576	634
MEDIAN	2.25	2.23	2.18	2.18	2.13
MEAN	2.34	2.34	2.31	2.29	2.27

FELLOWSHIPS AND RESEARCH GRANTS

The Graduate School has recently been notified of the following grants for further study and research. A file with complete information about each grant is available in the Graduate School office.

1) Aid for further graduate study:

- (A) Sigma Delta Epsilon Grant-in-Aid of \$500 for women, preferably 35 years of age or older, with degrees in the mathematical, physical, or biological sciences. Applications should be submitted by February 1.
- (B) Kent Fellowships for college graduates preparing for careers in higher education are awarded to those who have (1) intellectual ability and scholarly promise; (2) general excellence with special reference to those qualities that characterize the superior teacher, counselor, or administrator; and (3) an interest in developing a viable relationship between a career in higher education and a genuine religious commitment. Stipends range from \$1500 up with dependency and tuition allowances. Application should be made by January 6.
- (C) Atomic Energy Commission Fellowships in Nuclear Science and Engineering are available at a number of schools. Applicants should hold a bachelor's degree in engineering or a physical science. Stipends range from \$2400 to \$2800 plus a dependency allowance and tuition. Application must be filed by January 3.
- (D) Atomic Energy Commission Fellowships in Health Physics are open at a number of institutions. Applicants should hold a bachelor's degree in biology, chemistry, engineering, physics, or a related field. Stipend is \$2500 plus a dependency allowance and tuition. Apply before January 3.
- (E) East-West Center Scholarships at the University of Hawaii are available to 100 students for graduate study in a number of fields. Application should be filed by January 1.

2) Aid for further faculty study:

- (A) American Association of University Women Fellowships in the Natural Sciences are available to women with a doctorate in physics, chemistry, biology, euthenics, eugenics, or radiology. The stipend is \$5000; application should be made by December 1.
- (B) Organization of American States Fellowships and Professorships for research and study in OAS countries are available in all fields of study. Fellowship terms are for 3 months to two years. The stipend varies with individual circumstances. Application should be made by March 1 or September 1.
- (C) Society for Religion in Higher Education Post-Doctoral Fellowships are available to faculty in the humanities, social and natural sciences for a year of study in religion. Maximum stipend is \$8,500. Application should be submitted by January 31.

FELLOWSHIPS AND RESEARCH GRANTS (continued)

- (D) Space Technology Laboratories Fellowships for doctoral and post-doctoral study at MIT or Cal Tech are open to persons who have completed at least one year of graduate study in mathematics, engineering, or science. Fellows will work during the summer at STL and spend the academic year in study at MIT or Cal Tech. Stipend will be \$4,000 or higher. Apply before January 21.
- (E) Oak Ridge Institute for Nuclear Studies sponsors a Research Participation Program whereby scientists may spend 3 months or longer at Oak Ridge. Recipients will be paid their normal monthly salary plus \$75 a month. Applications for summer appointment should be filed by December 15.

THE HONORS PROGRAM

Seventy-two students (41 freshmen, 21 sophomores, 10 juniors) are enrolled in Honors Courses this semester.

Honors courses, faculty, and enrollment are:

Chemistry 183	J. C. Fanning	18
Economics 281	H. J. Wheeler	2
Electrical Engineering 284	R. N. Kersey	1
Electrical Engineering 383	R. N. Kersey	5
Electrical Engineering 385	C. P. Goodin	1
English 181	C. H. Watson	20
English 284	C. B. Green	9
History 181	R. S. Lambert	4
History 184	C. W. Bolen	7
Mathematics 186	A. T. Hind	8
Mathematics 483	J. L. Tilley	7
Mathematics 483	A. T. Hind	3
Physics 281	M. G. Miller	11
Textile Chemistry 385	J. J. Porter	2
Total		98

PERSONAL MENTION

Donald Miller (Physics) presented a paper on November 6 to the 21st Pittsburgh Diffraction Conference at the Mellon Institute.

H. F. Landrith (Educ.) appeared on the panel of teacher certification at the state student teachers association meeting in Columbia on October 26. On October 31, in Liberty, S. C., he conducted a workshop for school administrators on programmed instruction. M. A. Packer (Educ.) also conducted a workshop at the Liberty meeting.

J. M. Lewis (Extension) has been named District Agent for the Pee Dee District, effective November 1.

G. B. Nutt (Extension) presided at a meeting of Southern Directors of Extension during the Land Grant Association meeting in Chicago, November 10-13.

PERSONAL MENTION (continued)

Claud Green (English) will preside over a program sponsored by the American Studies Association at the annual meeting of the National Council of Teachers of English in San Francisco on November 29.

J. T. Acorn, R. H. Hunter, and I. Regnier (Architecture), having recently exhibited their work in a Three Man Show at the Greenville Museum of Art, Greenville, S. C., are currently exhibiting in a Three Man Show at the Gibbs Art Gallery, Charleston, S. C. Mr. Acorn and Mr. Hunter have received Purchase Awards from the Guild of South Carolina Artists' 13th Annual Exhibition Show now in the Columbia Museum of Art in Columbia, S. C. Mr. Hunter is also represented in two juried exhibitions: First Annual Gardens Art Exhibition, Pine Mountain, Georgia, and the Fourth Hunter Gallery Annual, Chattanooga, Tennessee.

James M. Stepp (Ag. Econ.) will participate in the invitational seminar on organization and methodology for river basin planning held in Atlanta, November 18-20, under sponsorship of the Water Resources Center, Georgia Institute of Technology.

R. F. Wheeler (An.Sci.) is a member of the executive committee, American Society of Animal Science.

L. H. Davis (Ag.Ed.) is serving this year as president of the Association of Teacher Education, Southern Region.

D. B. Garrison (Ag.Research) received confirmation this month of a \$3,000 research grant from the Gerber Products Co., a \$5,000 grant from the Norwich Pharmacal Co., and a gift of a greenhouse and valuable ornamental collection from Mrs. Frederick Klein.

K. Lehotsky (Forestry) has been notified that the AEC will renew their \$16,000 contract with Clemson for forestry research at the Savannah River AEC Plant.

John Huffman, L. E. Browder, T. W. Bethea, J. G. Dinwiddie, N. P. Marullo, S. P. McManus, H. G. Spencer, G. T. Cochran, J. B. Davis, and C. W. Milligan (Chemistry) will present papers at the SE regional meeting of the American Chemical Society in Charlotte, November 13-15. F. J. Lindstrom (Chemistry) will preside at one of the sessions.

M. A. Owings (English) chaired a session of the annual meeting of the South Atlantic Modern Language Association in Atlanta, November 14-16. C. O. Caskey (English) was secretary of a discussion circle at the Association meeting.

President Edwards has been elected president of the Southern Association of Land-grant Colleges for a one-year term beginning November 1, 1963.



C L E M S O N

Newsletter

NOT FOR PUBLICATION

CLEMSON COLLEGE LIBRARY
SOUTH CAROLINA COLLECTION

Vol. 3 No. 5

December 1, 1963

CALENDAR: DECEMBER 2-18

- Dec. 2 M Public lecture by Mr. Karel Yasko, Assistant Commissioner of the U. S. General Service Administration, on "Government Leadership in Building Design." 8:00 p.m., Architecture Auditorium.
- Dec. 2 M Public lecture by Dr. Sidney W. Fox, Professor, Florida State University, on "Theories of the Origins of Life." 8:00 p.m., Chemistry Auditorium.
- Dec. 2-18 Exhibition of landscape architecture. Examples include recent designs for residences, churches, schools and museums. Among landscape architects represented are Bye and Hermann, Pachall Campbell, Clarke and Rapuano. Lee Gallery, School of Architecture.
- Dec. 3 T Basketball: Clemson v. U. Ga. Field House.
- Dec. 3 T Sage Club, 6:30 p.m., Clemson House
- Dec. 3 T Mr. Thomas D. Efland, Director of Research, Head, Yarn Manufacturing Department, and Associate Dean, School of Industrial Management and Textile Science will speak on "The Hanover Textile Machinery Show and European Tour." 11:00 a.m., Sarrine Auditorium.
- Dec. 4 W Laicos, 8:15 p.m., Clemson House.
- Dec. 4 W Newcomers, 8:00 p.m., Clemson House.
- Dec. 4 W Public lecture by Professor James Lineberger, playwright in residence, Pfeiffer College, on "The Current Theater and Problems of the Young Playwright." 4:15 p.m., Physics Lecture Room 101.
- Dec. 5 Th Public lecture by Mr. E. R. Lashley, Vice-President of J. D. Williams Company, on "The Manufacture of Light Ferrous Metals." 1:00 p.m., Architecture Auditorium.
- Dec. 7 S Swimming: Clemson v. Va. YMCA Pool.
- Dec. 8 S Public concert, 3:30 p.m., YMCA.
- Dec. 9 M Forum Club, 7:00 p.m., Chemistry Building Conference Room.
- Dec. 10 T Public lecture by Mr. William E. Reid, President Riegel Textile Corp. on "Redistribution of Our Exports." 11:00 a.m., Sarrine Auditorium.

CALENDAR: (continued)

- Dec. 10 T AAUP meeting, 8:00 p.m., Physics Auditorium. Senator John West to speak. Faculty and public invited.
- Dec. 10 T Public lecture by Mr. H. E. Lacey, U. S. Naval Ordnance Laboratory, Silver Springs, Maryland on "Practical Application of Probability Theory in Optimizing Designs." 3:00 p.m., Mathematics Department.
- Dec. 11 W Woman's Club, 8:00 p.m., Clemson House Lounge. Husbands invited.
- Dec. 12 Th Joint dinner meeting of Clemson Chapter of Phi Kappa Phi and Piedmont Area Association of Phi Beta Kappa. Dr. Albert E. Stone, Chairman of the Department of English, Emory University, will speak on "Education, Neurosis, and the Intellectual." 7:00 p.m., Clemson House.
- Dec. 13 F Swimming: Clemson v. UNC. YMCA Pool.
- Dec. 16 M Public lecture by Dr. G. W. Pearce, Public Health Service. 4:00 p.m., Room 118, Brackett Hall.
- Dec. 17 T Fellowship Club, 6:30 p.m., Clemson House.
- Dec. 17 T Public lecture by Mr. Allen W. Taylor, Burlington Vice-President, Burlington Industries, Inc. on "New Developments in Synthetic Finishing." 11:00 a.m., Surrine Auditorium.
- Dec. 18 W Graduate Wives, 8:00 p.m.
- Dec. 18 W Christmas Holidays begin.

COLLEGE ACADEMIC CALENDAR

This calendar was revised 7/2/63. It was printed in the Newsletter October 1, and is being reprinted as a reminder to all concerned.

Last day to withdraw from college without having grades recorded	Tuesday	December 10
Christmas holidays begin at 1:00 p.m.*	Wednesday	December 18
Classes resume	Friday	January 3
Examinations begin	Thursday	January 16
Faculty meeting to consider candidates for grad.	Friday	January 24
Mid-year graduation	Saturday	January 25

* Follow Thursday, Friday, Saturday schedule Monday, Tuesday, Wednesday, December 16, 17, 18.

DATA ON FACULTY AND PROFESSIONAL STAFF

Fall semester data being presented to the Department of Health, Education and Welfare shows that 922 faculty and professional staff are employed by the College (full and/or part time). Of these, 322 teach or teach and research; 164 are classified as graduate assistants or lecturers; 11 are professional librarians; 256 are engaged in extension activities; 91 are engaged in full time research or public service activities; 34 are employed for work in student personnel activities; two are in hotel management; 16 are with the athletic association; and 26 are in general administration. Of the 922 employees 142 are women.

FACULTY-STUDENT RATIO

Each November each South Carolina state-supported college reports its student-faculty ratio. The ratio is determined by dividing undergraduate semester credit hours taken by 15, dividing graduate semester credit hours by 9, obtaining the total and dividing by the number of full-time equivalent faculty. The Clemson ratio for the past three years is:

<u>Year</u>	<u>Ratio</u>
1961-62	1 to 16.8
1962-63	1 to 17.6
1963-64	1 to 18.2

Elsewhere in the state (excluding A&M College at Orangeburg) the ratio ranges from 1:17.1 to 1:19.1.

GRADUATE RECORD EXAMINATION

The Graduate Record Examination will be given at Furman, Wofford, and the University of South Carolina on January 18. Students who need to take the examination before the next test date which is March 7, must submit applications to the Educational Testing Service before January 3. Forms are available in the Graduate School office. The charges are \$7 for the aptitude test, \$8 for the advanced test, or \$12 for both tests.

GRADUATE SCHOOL IS AWARDED EIGHT NDEA FELLOWSHIPS

Dean Hugh Macaulay has been informed that Clemson will have eight new NDEA three-year graduate fellowships, beginning in September, 1964. The list includes two each in physics, agronomy, chemical engineering, and agricultural economics. Each fellowship will pay an average of \$2200 per year to the student (plus \$400 per dependent) and \$2500 per year to the college. Thirteen NDEA Fellows are currently enrolled at Clemson in chemistry, plant pathology, entomology, agronomy and chemical engineering.

RESEARCH GRANTS SINCE NOVEMBER 15

The Department of Civil Engineering has received two research grants dealing with highway materials and methods of testing. One grant from the South Carolina Highway Department for \$36,030 is for a two-year study and development of a rapid means of determining density and moisture content of soils and granular materials. The second grant is a project under the National Cooperative Highway Research Program and is administered by the Highway Research Board. This one-year study on "Rapid Test Methods for Field Control of Construction" is supported by a budget for \$29,850. Arnold E. Schwartz, Joseph H. Moore, and Joseph P. Rostron will conduct the studies with the aid of graduate research assistants.

J. C. Fanning (Chemistry) has been advised by the Directors of the Wolcott Gibbs Fund of M.I.T. that he has been awarded \$500 for research on complexes of 8-Aminoquinoline with Givalent and Trivalent Metal Ions.

CLEMSON WOMEN GRADUATES ELIGIBLE FOR AAUW MEMBERSHIP

President Edwards has been advised by Dr. Blanche Dow, President of the American Association of University Women, that Clemson College has been placed on the organization's list of approved colleges and universities. This means that women graduates, past and future, will be eligible for membership in the National AAUW. The AAUW is an outstanding women's organization with units throughout the United States. The Clemson unit is headed by Mrs. Hugh A. Woodle, 104 Folger Street.

HOME STATES OF CLEMSON STUDENTS

A study of the home states of Clemson's current student body shows that forty-one of the fifty states are represented. In addition, students are from Puerto Rico, the Canal Zone, the District of Columbia, and several foreign nations.

States with no student representation are Arkansas, Colorado, Minnesota, Nevada, North Dakota, Oregon, South Dakota, Vermont and Wyoming.

Other than South Carolina, states which are heaviest in representation are North Carolina (273), Georgia (230), Florida (109), New Jersey (105), Pennsylvania (84), and New York (82). Of the 4376 students 3123 are residents of South Carolina.

NEWSLETTER PUBLICATION SCHEDULE FOR DECEMBER-JANUARY

This issue of The Newsletter will be the last until January 15, due to the holidays. Material for the January 15 issue should be in the hands of appropriate people prior to January 12.

FIRE REGULATIONS FOR BASKETBALL GAMES

In order to comply with Clemson College fire and safety regulations, the Clemson College Athletic Department announces that the following will apply for those attending basketball games at the Field House.

1. Admission for students, faculty-employees and general admission shall be on a first-come, first served basis. (Holding of seats for others not permitted.)
2. All persons must be seated and when this capacity has been reached, there will be no further admissions.
3. Doors will be opened at 5:30 p.m. for all home games.
4. In the interest of safety, children under 10 years of age will not be admitted unless accompanied by adults and must remain with adults during the game. They will not be allowed to sit on the first row.
5. Spectators are requested to refrain from smoking.

SCHOLASTIC APTITUDE TEST PROFILE OF CURRENT FRESHMEN (BY MAJOR SCHOOL)

The table below indicates the verbal and math aptitude ranges of our current freshmen, by major schools. 30.3% of the freshmen are from the upper fifth of their high school classes; and 61.9% are from the upper two-fifths.

Score Range	<u>Agriculture</u>		<u>Architecture</u>		<u>A & S</u>		<u>Engineering</u>		<u>IM & TS</u>	
	<u>Verbal</u>	<u>Math</u>	<u>Verbal</u>	<u>Math</u>	<u>Verbal</u>	<u>Math</u>	<u>Verbal</u>	<u>Math</u>	<u>Verbal</u>	<u>Math</u>
200-249	1	0	0	0	0	0	0	0	0	0
250-299	6	0	1	0	1	0	7	0	4	0
300-349	24	2	8	0	19	4	58	0	22	0
350-399	40	14	14	2	40	20	101	10	38	11
400-499	27	29	14	7	50	38	119	51	35	42
450-499	22	38	16	20	59	60	107	126	24	48
500-549	10	23	21	19	36	53	64	130	20	27
550-599	3	18	6	16	26	33	34	114	4	17
600-649	1	8	4	14	10	24	18	58	4	4
650-699	2	1	1	7	9	10	11	26	0	2
700-749	1	3	0	0	3	11	1	4	0	0
750-799	0	1	0	0	0	0	0	1	0	0
Median	396	480	468	535	464	505	439	528	416	473

STUDENTS DISCHARGED SINCE NOVEMBER 6

The following students have been discharged since the last list was issued on November 6, 1963:

<u>Name</u>	<u>Major Course</u>	<u>Effective Date</u>
Ayres, William Carter	TM	November 18, 1963
Barnhill, Donald Eugene	IM	November 8, 1963
Boatwright, Clifford Bedelle	ME-GRAD	November 7, 1963
Brunson, Robert Leon	ME	November 19, 1963
Burch, Richard Floyd	PS	November 20, 1963
Chapman, Elbert S., Jr.	IM	November 18, 1963
Donahue, John T.	TM	November 12, 1963
Dowdy, Russell Lee III	IM	November 7, 1963
Farden, James North	ME	November 11, 1963
Gélinas, Réjean Georges	TC-GRAD	November 13, 1963
Hayden, John Haskell	DySc	November 11, 1963
Littleton, Sammy L.	IE	September 12, 1963
McCrackan, Mary Lee	Uncl-STAFF	November 26, 1963
Miller, Jerry Morris	EE	November 19, 1963
Moon, John David	AgEd	November 27, 1963
Oglesbee, Tom Wright, Jr.	CE	November 25, 1963
Parker, Jerry Cade	IM	November 18, 1963
Perry, Roger Gwinn	TM	October 28, 1963
Powers, Vance Cawood III	Pre-Vet	November 26, 1963
Ramey, Henry Ernest, Jr.	ME	November 18, 1963
Riley, Howard L.	Pre-Vet	November 22, 1963
Sanders, William Pinckney III	AgEc	November 18, 1963
Sikes, Robert Clay	IE	November 27, 1963
Smoak, Theodore Lester	EE	November 11, 1963
Thomas, Billie M.	IM	November 20, 1963
Timmerman, James William, Jr.	DySc	November 25, 1963
Walters, Douglas Cole	IM	November 25, 1963
Wiggins, James Eugene	E	November 8, 1963
Wood, Allen Price	Arch	November 19, 1963

MINUTES OF THE RESEARCH FACULTY COUNCIL

The meeting was called to order at 3:30 p.m. on November 15 by Chairman Bardsley. Dr. Bardsley welcomed Dean J. K. Williams, who met with group to clarify the present relationship between the Research Faculty Council and the academic administration.

(1) Dean Williams discussed the following items briefly:

- (a) The recent audit of the college records.
- (b) The relationship of the research faculty with the complete college faculty.
- (c) The college patent policy.
- (d) The leave policy as it applies to new employees.
- (e) The outside work policy as it applies to both teaching and research personnel.

Dean Williams was excused from the meeting early because he had other commitments.

(2) After some discussion of the complications of working out a unification of the academic and research faculties, Chairman Bardsley and Dr. G. Meenaghan were asked to meet with the Academic Faculty Senate Policy Committee, which is presently working on this matter, to give them any possible assistance in the work.

(3) As a result of further discussion, Dr. Bardsley appointed two committees to special assignments. The first committee (with the following memberships: H. L. Steele, Chairman, M. J. Skove, and R. L. Edwards) was asked to investigate the possibility of establishing a Graduate Faculty at Clemson. The second committee (with the following membership: R. W. Henningson, Chairman, A. L. Shewfelt, and E. S. Olson) is to examine the outside work policy.

The meeting was adjourned at 5:35 p.m.

Respectfully submitted,

Alvon C. Elrod, Secretary

MEMBERS ABSENT:

P. E. Robbins
F. J. Lindstrom

NEW ENGINEERING PROGRAM APPROVED

The College Curriculum Committee and the Educational Council have approved a plan for a five-year program in civil engineering, effective September 1, 1964. The program will be extended to other engineering fields at later dates.

The plan will allow eligible students who graduate from the regular four-year civil engineering curriculum with B.S. degrees to continue for an additional two semesters, earning a professional degree as a result.

Basically, the program is:

Upon graduation with a B.S. degree, an engineering student with a sufficient G.P.R. will have two academic programs available to him. If he plans a career in teaching, research, or high-level design he will pursue courses of study leading to graduate degrees. Admission to graduate school will be contingent upon meeting current standards.

If the student plans a career in management, engineering operations, sales, or other phases of design he will have available to him a post-graduate, professional program of one academic year duration. Course-work will consist of 30 semester hours divided into three areas of concentration: operations, management, and technical specialty. No thesis will be required. The degree of Bachelor of Civil Engineering, Bachelor of Electrical Engineering, Bachelor of Mechanical Engineering, Bachelor of Chemical Engineering, Bachelor of Industrial Engineering, Bachelor of Ceramic Engineering, or Bachelor of Agricultural Engineering will be awarded upon the successful completion of the program. Graduation from the professional program will require a grade point ratio of 2.5 or better on course work completed as part of the program's requirement.

Admission to the professional program will require a B.S. degree in an engineering field, a grade point ratio of 2.0, and the recommendation of at least three faculty members in the student's major field. Written applications on forms similar to those now used by the graduate school would be required of those desiring to apply for admission to the program. From figure 2 it can be seen that approximately 30 per cent of the graduating seniors have grade point ratios of below 2.0. The G.P.R. for admission will be raised 0.1 each time the G.P.R. required for graduation from the Bachelor of Science program is raised.

Course work in the professional program will be selected primarily from advanced undergraduate offerings. However, with written approval of the Dean of the Graduate School, a student who graduates from a B.S. degree program with a grade point of 2.7 or better will also be permitted to enroll in courses carrying a five hundred number. A student entering the professional program with a grade point ratio less than 2.7 will not be allowed to enroll in five hundred courses the first semester, but may be allowed to enroll in them during the second semester if his grade point ratio in the professional program is 3.0 or better.

PERSONAL MENTION

G. F. Meenaghan and F. C. Alley (Ch.E.) presented papers on November 20 at the 14th Industrial Wastes Conference at Stillwell, Oklahoma.

A. D. Lewis (M.E.) was a discussant at a technical session of the American Society of Mechanical Engineers held in Philadelphia, November 17-20.

D. F. Bruley (Ch.E.) presented a paper at the annual meeting of the American Institute of Chemical Engineers at a meeting in Houston, Texas, December 1-5.

G. C. Robinson (Cer.E.) presented a paper at the Clay Plant Operator's Forum at Raleigh, N. C. meeting, November 20-22.

Hugh McGarity (Music) presented a paper to the Western Carolina Torch Club at its October meeting in Greenville.

H. E. Vogel (Phy.) presented a paper on November 20 at the Savannah River Laboratory Colloquium.

A showing of proposals for Drum Island in the Cooper River will be held through December 15 at the Gibbs Gallery in Charleston. The proposals are the work of Clemson architectural students and Harlan McClure (Arch.) gave the gallery talk at the opening of the show.

Harvey Hobson (Chem.) represented the College at the inauguration of the president of Emory University on November 15. Waldron Bolen (Hist.) represented the College at the inauguration of Duke University's new president on December 11.

Everett Laitala (I.E.) presented a paper before the Greenville-Spartanburg Chapter of the American Society of Tool and Manufacturing Engineers on November 13.

Joseph P. Rostron (C.E.) presented a paper at the Southeastern Association of State Highway Officials in Charleston, S. C. on November 20.

W. C. Whitten (Econ.) led the discussion of the papers read at the session on "Thought Prior to 1860," at the annual meeting of the Southern Economics Association, held in Roanoke, Virginia, November 14-16.

R. H. Garrison (Ag.) presented a paper on November 15 to a joint meeting in Lexington, Kentucky, of the Kentucky Crop Improvement Association and Seedsmen's Association.

A. S. Tombes, T. R. Adkins, and J. A. Hair (Ento.) presented papers at the meeting of the Entomological Society of America in St. Louis, December 1-5.

R. W. Henningson presented a paper November 26 at the meeting of Dairy Fieldmen and Sanitarians, held in Raleigh, N. C.



C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 3 No. 6

January 1, 1964

CALENDAR: JANUARY 3-18

- Jan. 3 F Classes resume.
- Jan. 6 M Dr. Morris Rockstein, Department of Physiology, School of Medicine, University of Miami will speak on "Biology of Aging" at Entomology and Zoology seminar. 4:00 p.m., Room A-101 P&AS Bldg.
- Jan. 7 T Mr. Frank H. Cunningham, Asst. Vice-President, Reeves Bros. Piedmont Cotton Division, will lecture on "Cotton Procurement," 11:00 a.m., Auditorium, Sirrine Hall.
- Jan. 7 T Sage Club, 6:30 p.m., Clemson House.
- Jan. 8 W Graduate Wives, 8:00 p.m., Clemson House.
- Jan. 8 W Basketball: Clemson vs. Duke.
- Jan. 8-18 Student Exhibit: Architectural Design, Visual Arts and Construction. Each winter the School of Architecture presents a group of student architectural solutions from the four years of architectural design, basic design and visual arts. Lee Gallery.
- Jan. 9 Th Woman's Club, Mrs. Donald Russell will speak. 3:30 p.m., Clemson House.
- Jan. 11 S Swimming: Clemson vs. N. C. State.
- Jan. 13 M Forum Club, 7:00 p.m., Chemistry Building Conference Room.
- Jan. 14 T Faculty Senate, 4:00 p.m., Olin Hall.
- Jan. 15 W Laicos, 8:15 p.m., Clemson House.
- Jan. 15 W Newcomers Club, 8:00 p.m., Clemson House.
- Jan. 16 Th Examinations begin.
- Jan. 18 S The Graduate Record Examination will be administered at Furman, Wofford, the University of South Carolina and the College of Charleston on January 18, 1964. Applications to take the Examination should be submitted to the Educational Testing Service, Princeton, New Jersey, by January 3.
- Jan. 21 T Fellowship Club, 6:30 p.m., Clemson House.

EXAMINATION SCHEDULE: FIRST SEMESTER, 1963-64

1. Examinations in subjects which meet:

8 MWF	will be held	1-4 p.m.	Friday	January 17
8 TThS	will be held	8-11 a.m.	Saturday	January 18
9 MWF	will be held	1-4 p.m.	Thursday	January 16
9 TThS	will be held	1-4 p.m.	Saturday	January 18
10 MWF	will be held	8-11 a.m.	Tuesday	January 21
10 TThS	will be held	8-11 a.m.	Friday	January 17
11 MWF	will be held	8-11 a.m.	Monday	January 20
11 TThS	will be held	8-11 a.m.	Thursday	January 16
12 MWF	will be held	1-4 p.m.	Monday	January 20
1 MWF	will be held	7-10 p.m.	Monday	January 20
2 MWF	will be held	1-4 p.m.	Tuesday	January 21
3 MWF	will be held	8-11 a.m.	Thursday	January 23
1,2,3, TTh	will be held	1-4 p.m.	Wednesday	January 22

2. Examinations in subjects which meet for four or five hours a week, e.g., 8 MTThF or 8 MTWThF, may use either the period designated for MWF group or the period designated for the TThS group. The choice of which period is to be used should be made by the professor of the department concerned.
3. Special arrangements will be made by professors concerned for examinations in Math 100 and 103, DySc 409, Ed 406, Engl 435, Hist 412, IE 201, ME 405, and various graduate courses.
4. Examinations in laboratory work, if required, will be held at the last meeting of the laboratory class. Examinations in courses which meet one hour theory and three hours laboratory may be given at the last meeting of the laboratory class.
5. The regular schedule of classes for this semester will continue until 1 p.m., Wednesday, January 15. No examinations, special or otherwise, will be held on Wednesday afternoon, January 15.
6. All grades for candidates for graduation are due in the Deans' offices NOT LATER THAN 10 a.m., Wednesday, January 22. Such candidates for graduation as have examinations scheduled for 8 a.m., Wednesday, January 22, or a later time may arrange with the professors concerned to stand examinations in these subjects ahead of schedule.
7. All other grades are due in the Deans' offices NOT LATER THAN 2 p.m., Friday, January 24.
8. No changes in this schedule will be made without the approval of the Faculty Schedule Committee.

INTERNAL REVENUE BROADENS DEDUCTIBILITY FOR RESEARCH EXPENSES OF COLLEGE TEACHERS

Tax-deductibility of travel and related research expenses by college faculty members will be recognized by a new Internal Revenue ruling (63-275) to be published December 30, 1963. The ruling grows out of a conference called by Revenue Commissioner Caplin to discuss the Davis case, in which Internal Revenue had rejected claims for travel deduction by a professor who went to Europe for research in his field.

The new ruling, in part, is as follows:

"...research expenses, including traveling expenses properly allocable thereto, incurred by a professor for the purpose of teaching, lecturing, and writing and publishing in his area of competence, as a means of carrying out the duties expected of him in his capacity as a professor and without expectation of profit apart from salary, represent ordinary and necessary business expenses incurred in that capacity and are, therefore, deductible under section 162 (a) of the Code.... The responsibility rests with each professor to show that the amount claimed are reasonable in relation to the research performed and that the research is in his area of competence; that is, that the research is directly related to the general field in which the professor is performing services as an educator."

Note: The Tax Court had previously held in the Davis case that the expense incurred must be a requirement or condition of employment. The American Association of University Professors has done the major work on getting the new ruling.

ADDITION TO EE FACULTY

William Daniel Stanley of Bladenboro, N. C. and Sarasota, Florida will join the faculty of electrical engineering in February as an assistant professor.

Dr. Stanley holds the B.S. from the University of South Carolina, and the M.S. and Ph.D. from North Carolina State. He has six years of teaching experience at N. C. State and the University of Florida and is currently project engineer with Electro-Mechanical Research, Inc. of Sarasota, Florida.

He is a member of Phi Beta Kappa and Phi Kappa Phi, Sigma Xi, and several professional groups. He has published papers on digital computer programs. His wife, the former Mary Louise Nicholas, is from Enosburg Falls, Vermont.

SCHOLARSHIP AWARDS IN HORTICULTURE

Dean W. Wiley (Agric.) has been notified by Mr. T. R. Morris, President of the South Carolina Fresh Fruit and Vegetable Association, that the Association will award a four-year undergraduate scholarship to a Clemson student in horticulture, beginning in 1964. When the program reaches full growth, four students (one in each undergraduate year) will be scholarship holders in the program. Students will be selected by the college.

NSF AWARDS INSTITUTE TO BOTANY

J. E. Halpin (Bot-Bact.) has been advised by the National Science Foundation that an application from the Clemson Department of Botany and Bacteriology to hold a summer institute for selected high school students has been approved. Complete details will be available soon in a printed folder which may be obtained from Dr. Halpin.

POST-DOCTORAL RESEARCH FELLOW JOINS CHEMISTRY

Sumat P. Garg of India joined the faculty in chemistry on January 1 as a post-doctoral research fellow. Dr. Garg's graduate degrees are from Agra University and Allahabad University, and he has served at Allahabad since 1961 as a lecturer and research fellow.

AIRLINE GUIDE AVAILABLE

The College is a subscriber to the North American edition of the Official Airline Guide, a publication which gives up-to-date information on airline schedules, fares and general air travel information. The publication will be located in the President's office and any member of the faculty or staff is invited to use it.

MINUTES OF THE FACULTY SENATE

The ninety-second meeting of the Senate of the Academic Faculty of Clemson College was held on Tuesday, December 10, 1963, in the auditorium of Olin Hall with President J. G. Dinwiddie, Jr., presiding. Having a quorum present, the meeting was called to order, and the reading of the minutes was dispensed with.

Regarding the problem of outside interference with the academic work of the students, President Dinwiddie reported that at the last meeting of the Educational Council, President Edwards made a statement that he thought the College should come up with a definite policy in this area. President Dinwiddie offered the services of the Senate in drafting such a policy, since there were some specific matters in this field that the Admissions and Scholarship Committee was presently working on. He assumed the Senate would get an official request from Dean Williams forthwith.

Professor W. B. Barlage, Chairman, reported for the Policy Committee. He submitted to the members a copy of the proposed changes of the Constitution and By-laws of the Faculty and Faculty Senate. Professor Barlage pointed out some of the changes that were made and asked the Senate to compare the proposed changes with the present Constitution and By-laws printed in the Manual in preparation for action at the January meeting.

Professor T. A. Campbell, Chairman of the Admissions and Scholarship Committee, submitted a resolution in the form of a motion involving Faculty notice of field trips. The motion was seconded and a general discussion followed. Professor L. E. Hill moved to table the resolution, pending work on the general policy involving interference with academic work. Said motion was seconded and carried.

President Dinwiddie read a resolution passed by the Student Senate involving tests scheduled after concerts. He then read a copy of a letter from Dean J. K. Williams to the Secretary of the Student Senate spelling out the College's feeling on the problem. There was complete agreement in the Senate that Dean Williams' letter satisfied fully the Faculty's feeling on this matter, and President Dinwiddie said he, along with the Senate Secretary, would write a letter to the Student Senate substantiating what Dean Williams had already written.

There being no further business, the meeting adjourned.

Respectfully submitted,

Susan Brown, Secretary

Members Absent:

Davis, L. H.
Flatt, J. L.
Lewis, A. D.
McCormac, J. D.
Reed, C. A.
Stillwell, E. P.

WSPA (CH. 7) TO OFFER "SUNRISE SEMESTER"

Beginning February 3, WSPA-TV will carry the New York University program, "Sunrise Semester." The two courses to be offered are "Outlines of the History of Art" and "The Legacy of Greece and Rome." Showing time for the programs will be 6:30-7:00 a.m. Monday-Friday and 6:45-7:45 a.m. Saturday.

Brief descriptions of the courses are:

THE LEGACY OF GREECE AND ROME: PROFESSOR LIONEL CASSON

Western civilization is rooted in the world of Greece and Rome. The speculations of its philosophers, the prose and poetry of its writers, the political forms by which it is governed, some of the very cities men live in today and roads they travel on---all in one way or another owe a debt to what was done by Greeks and Romans. The purpose of this course is to introduce the student to these gifted peoples, to acquaint him with the masterpieces of their literature and art, and to point out those aspects of their culture that have had the most significant effect on subsequent ages.

The Greeks were writers, thinkers, and artists. The course begins with Homer's great poems; dwells at length on the unique achievements in drama, history, philosophy, and art of Athens' golden age; and takes a brief look at the flowering of research dramatically enlarged by the conquests of Alexander the Great.

The Romans were organizers, planners, and engineers. The course traces their steady rise in importance from a mere village to a world empire, and sketches the tumultuous century of civil wars that brought to the fore personalities who have found a place in the literature, art, and political theory of practically every nation of the West. It takes a long look at the Roman Empire, pointing out how greatly Rome affected the later map of Europe, illustrating its solid contribution to the political and social life and physical welfare of its citizens, and reviewing its great writers and the profound effect they had on later literature.

OUTLINES OF THE HISTORY OF ART: ASSOCIATE PROFESSOR JANE COSTELLO

The first part of the course deals with the fifteenth century: the meticulous realism of the painters of North Europe. In Italy, during the same period, there was a rapid development in Florence, as shown in the works of Masaccio, Fra Angelico, and others. This reaches its peak during the High Renaissance in Rome, where Michelangelo and Raphael created the decorations of St. Peters and the Vatican. Later, in the seventeenth century, Caravaggio, Rembrandt, and Velasquez became preoccupied with reality and subtle effects of illumination. Others opposed this trend with a cool and temperate classicism, as for instance the French painter, Nicolas Poussin. The lighthearted style of the French rococo followed, and was succeeded by the art of the French Revolution (Jacques Louis David), and the realism (Courbet) and romanticism (Delacroix) of the nineteenth century.

The last part of the course concentrates on the origin and development of modern art. This is lead off by the impressionists (Manet, Monet, Degas, Renoir) who paint a colorful and visual record of the appearance of the world. The post-impressionists (Cézanne, Seurat, Van Gogh, Gauguin) continue, but alter, the style, either filling their paintings with powerful emotion, or introducing the permanence of geometric form. These divisions continue on into the more recent phases of art, the surrealists (Chirico, Miro, Dali), and the cubists (Picasso, Braque).

Course study outlines and text lists are available on request from the Dean of the College, Tillman Hall.

PERSONAL MENTION

Patricia Wannamaker (English) has been granted leave beginning in March to complete requirements for her doctorate at Louisiana State University.

W. H. Durham (Ag. Comm.) has resigned as Associate Radio-TV Editor to accept a position at Duke University.

Donald A. King (Math) has been granted leave to work toward his doctorate at Peabody College.

Mark S. Steadman (English) has completed all work for his Ph.D. at Florida State University.

Gordon Gourlay (Library) has been invited to serve as a member of the Self-Study Visitation Committee (Southern Association of Colleges and Schools) to visit Middle Tennessee State College in February. C. B. Green (English) will serve on a similar committee in May to visit William and Mary College. J. K. Williams (Adm.) will chair the Committee to visit Louisiana State University in April.

Linvil G. Rich (Engr.) has been appointed to the Board of Directors of the American Academy of Sanitary Engineers. Dean Rich was sponsored by the American Society of Engineering Education and will serve a three year term on the Board.

Charles Sappenfield (Arch) was featured recently on the faculty lecture series at Warren Artson College. He also served as honor awards chairman in December for the Charlotte section of A.I.A. (North Carolina).

John F. Andrews (CE) has been awarded a three-year research contract (\$58,444) by the National Advisory Environmental Health Committee (Division of Water Supply and Pollution Control).

Fred Lindstrom (Chem) attended the Midwest University Invitational Analytical Chemistry Conference at Lawrence, Kansas, December 5-8. He was one of 98 invited from the U. S.

George B. Nutt, Director of Extension, was installed as a member of the Extension Committee on Organization and Policy (ECOP) at the recent meeting of the Association of Land-Grant Colleges and State Universities. He will serve on the committee four years as a representative of the Southern region.

Director Nutt has also been selected by the Progressive Farmer Magazine as Man of the Year in South Carolina Agriculture for 1963. Mrs. Sallie Musser (Home Demonstration) has been selected Woman of the Year in South Carolina Agriculture by the same magazine.

B. J. Todd (Ag. Econ) has been awarded a National Science Foundation Fellowship for graduate study toward the doctorate at North Carolina State.



C L E M S O N

Newsletter

NOT FOR PUBLICATION

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

Vol. 3 No. 7

January 15, 1964

CALENDAR: JANUARY 17-FEBRUARY 6

- Jan. 17-23 Examination week.
- Jan. 21 T Fellowship Club, 6:30 p.m., Clemson House.
- Jan. 22 W Graduate Wives, 8:00 p.m., Clemson House.
- Jan. 24 F Academic Faculty Meeting, 3:00 p.m., Chemistry Auditorium.
- Jan. 25 S Mid-year graduation, 3:00 p.m., College Auditorium.
- Jan. 27 M Forum Club, 7:00 p.m., Chemistry Building Conference Room.
- Jan. 29 W Laicos Club, 8:15 p.m., Clemson House
- Jan. 29-30 Registration, all students. English-Math Building.
- Jan. 30 Th Winthrop Daughters, 8:00 p.m., home of Mrs. Roy Cooper, 212 Edgewood Ave. All Winthrop Daughters in the Clemson area are invited to attend.
- Jan. 31 F Second semester classes begin--abbreviated class schedule.
- Feb. 4 T Sage Club, 6:30 p.m., Clemson House.
- Feb. 4 T Basketball: Clemson v. Furman.
- Feb. 6 Th Woman's Club, 3:30 p.m., Clemson House.

ADDITION TO MATH FACULTY

Stanley M. Lukawecki of Norwood, Massachusetts and Denton, Texas will join the mathematics faculty in September as an associate professor.

Dr. Lukawecki has the B.S. from S.E. Louisiana College and the Ph.D. from Auburn University. He has had eight years of teaching experience at Auburn, the University of S. W. Louisiana, and Texas Womens University. He has also worked as a consultant mathematician for NASA in Huntsville, Alabama.

Dr. Lukawecki is a member of Phi Kappa Phi, Sigma Xi, Pi Mu Epsilon, and professional mathematics groups.

CLEMSON TO HOLD NSF SUMMER INSTITUTE FOR SECONDARY SCHOOL TEACHERS

F. I. Brownley (Chem.) has been advised by the National Science Foundation that Clemson's request to sponsor a 1964 summer institute for secondary school teachers has been granted. The NSF grant for the Institute is \$57,100.

Printed information about the Institute is being prepared and will be available from Dr. Brownley, Brackett Hall.

HOPEDALE CHARITABLE FOUNDATION AWARDS PROFESSORSHIP TO MECHANICAL ENGINEERING

President Edwards has been notified that the Hopedale Charitable Foundation of the Draper Corporation has awarded a professorship to the Clemson ME department.

The professorship, or chair, will be valued at \$3,000 per year in addition to normal salary. The recipient of the award, who is yet to be selected, will carry the title "Draper Professor of Mechanical Engineering."

This latest gift brings to four the number of professorships at Clemson. Additional assistance of this nature is being sought.

DUPONT COMPANY GRANTS

The duPont Company has informed President Edwards that it will grant this year a \$2,000 summer research grant to the Department of Chemical Engineering and a \$1,200 graduate student assistantship to the Department of Chemistry. Recipients of the awards will be announced at a later date.

NASA PRE-DOCTORAL TRAINING GRANTS

Clemson has been awarded five new three-year NASA Training Grants to begin in September 1964. These grants are to be given to doctoral candidates who are studying in space related sciences. Each traineeship carries a stipend of \$2,400 a year plus a dependency allowance and a cost-of-education allowance to the college. These five new grants are in addition to the four which were received last year and will continue for two more years.

SWINT FOUNDATION AWARDS \$1,000 TO FACULTY DEVELOPMENT FUND

The Swint Foundation of Augusta, Georgia has granted the college \$1,000 which will be used (with an Alumni Loyalty Fund grant) in faculty recruitment and to assist the faculty in such endeavors as trips to professional meetings, enrollment in post-graduate conferences and institutes, and the like.

BINDING OF FACULTY THESES

The Graduate School will be glad to arrange for faculty theses and dissertations to be bound with the same black, hard-cover binding and gold lettering that is now used for Clemson theses and dissertations. The charge will be \$3 per copy which should be paid at the Bursar's Office. The thesis along with the receipt for payment should then be presented to the Graduate School Office. Theses are usually sent for binding about ten days after graduation and are returned four to six weeks later.

APPROVAL GIVEN TO DOCTORAL PROGRAM WITH TEXTILE CHEMISTRY MAJOR

The Department of Chemistry and Geology and the Department of Textile Chemistry have initiated a doctoral program in which the dissertation research will be carried out in an area of textile chemistry and the course requirements will be taken from current offerings of the two departments.

Research will be in fundamental area, although one which may be somewhat closer to practical utilization than some of the current research underway.

PREDICTED CLEMSON ENROLLMENT TO 1975

K. N. Vickery, Director of Admissions, has projected Clemson's undergraduate and graduate enrollment to the 1974-1975 academic year, as follows:

<u>Year</u>	<u>Undergraduate</u>		<u>Graduate</u>	<u>Total</u>
	<u>Men</u>	<u>Women</u>		
1964	4083	250	302	4635
1965	4215	385	350	4950
1966	4345	535	400	5280
1967	4520	685	448	5653
1968	4611	760	502	5873
1969	4695	850	562	6107
1970	4874	955	618	6447
1971	4929	1050	680	6659
1972	5074	1200	748	7022
1973	5173	1250	823	7246
1974	5272	1300	905	7477
1975	5381	1360	995	7736

GRADUATE COUNCIL MINUTES DECEMBER 12, 1963

The Graduate Council met in the Graduate School Office at 2:00 p.m. on December 12, 1963.

The Council considered and approved a proposal to begin a Ph.D. degree program in Engineering Mechanics in September 1964. A copy of the proposal is available in the Graduate Office.

A request by the faculty in History that they be authorized to begin a program leading to the M.A. degree was discussed and approved. A copy of the approved program is available in the Graduate Office.

The Council tabled a proposal that (1) completion of Scientific German (with a grade of B or better) be accepted as meeting the German language requirement for advanced degrees other than the M.A. and (2) subject to approval, completion of two years of language courses taken at other schools, equivalent to those that may be taken at Clemson to meet the language requirement, be accepted as meeting the language requirement. It was pointed out that these alternatives had been discussed and approved at a previous Council meeting.

A proposal to reword the residence requirement was considered and tabled, to be reconsidered at the next meeting of the Council.

The following courses were approved:

Ag Ec	502	Economics of Agricultural Production	3 cr(3,0)
Ag E	506	Instrumentation in Agricultural Research	3 cr(2,3)
CE	532	Advanced Soil Mechanics	4 cr(3,3)
CE	533	Physical and Physio-chem. Properties of Soils	4 cr(3,3)
CE	546	Pollution of the Aquatic Environment	3 cr(2,3)
CE	547	Selected Topics in Water Resources Engr.	3 cr(3,0)
Ch	526	Chemistry of Enzymes	3 cr(3,0)
Econ	511	Seminar in Labor Economics	3 cr(3,0)
In Ed	520	Recent Process Developments	3 cr(3,0)
EM	523	Dimensional Analysis and Dynamic Similarity	3 cr(3,0)
EM	527	Topics in Analytical Mechanics	3 cr(3,0)
EM	529	Energy Methods and Variational Principles	3 cr(3,0)
EM	534	Theory of Elastic Stability	3 cr(3,0)
EM	545	Intermediate Dynamics	3 cr(3,0)
EM	552	Theory of Ideal Fluid Flow	3 cr(2,0)
EM	553	Theory of Viscous Fluid Flow	3 cr(3,0)
EM	556	Flow in Open Channels	3 cr(3,0)
EM	589,590	Seminar	1 cr(1,0)
Hist	507	United States Foreign Policy Since 1877	3 cr(3,0)
Math	510	Topology	3 cr(3,0)
Math	511	Real Variables	3 cr(3,0)
Math	512	Functional Analysis	3 cr(3,0)
Math	513	Stochastic Processes	3 cr(3,0)
Phys	504T	Astronomy for High School Teachers	3 cr(3,0)

Information regarding changes in the program in mathematics and a change in the program in chemistry to include study in textile chemistry was distributed to the Council.

The Council adjourned at 3:35 p.m.

COURSE PREFERENCES OF NEW STUDENTS ON FILE FOR ENTRANCE IN JUNE AND SEPTEMBER 1964
AS COMPARED WITH 1963 APPLICANTS ON FILE AS OF JANUARY 1, 1963

<u>MAJOR COURSE</u>	<u>1963</u> <u>TOTAL</u>		<u>1964</u> <u>TOTAL</u>		<u>NUMBER OF</u> <u>BOYS, 1964</u>	<u>NUMBER OF</u> <u>GIRLS, 1964</u>
Agriculture	38		33		33	0
Agricultural Economics	1		6		6	0
Agricultural Engineering	14		9		9	0
Agricultural Education	2		4		4	0
Agronomy	4		2		2	0
Animal Science	8		9		9	0
Biology	7		37		30	7
Dairy Science	7		2		2	0
Entomology	4		3		3	0
Food Technology	0		0		0	0
Forestry	40		67		67	0
Horticulture	5		6		3	3
Poultry Science	2		1		1	0
Pre-Veterinary	34		35		28	7
	<u>166</u>	12.5%	<u>214</u>	11.9%	<u>197</u>	<u>17</u>
Architecture	197		258		252	6
Building Construction	0		7		7	0
	<u>197</u>	14.8%	<u>265</u>	14.7%	<u>259</u>	<u>6</u>
Applied Mathematics	37		74		61	13
Arts & Sciences	86		191		150	41
Chemistry	44		54		47	7
Physics	16		31		30	1
Pre-Medicine	78		131		119	12
	<u>261</u>	19.6%	<u>481</u>	26.8%	<u>407</u>	<u>74</u>
Engineering	178		238		237	1
Ceramic Engineering	20		10		9	1
Chemical Engineering	57		67		66	1
Civil Engineering	84		87		86	1
Electrical Engineering	119		149		149	0
Industrial Education	0		2		2	0
Industrial Engineering	20		14		14	0
Mechanical Engineering	89		115		115	0
Metallurgical Engineering	1		1		1	0
	<u>568</u>	42.8%	<u>683</u>	38.0%	<u>679</u>	<u>4</u>
Industrial Management	89		110		109	1
Textiles	13		14		14	0
Textile Chemistry	10		9		9	0
Textile Management	21		13		12	1
Textile Science	3		9		9	0
	<u>136</u>	10.3%	<u>155</u>	8.6%	<u>153</u>	<u>2</u>
Total Expressing Major Course Choice	1328		1798		1695	103
Undecided	84		90		82	8
GRAND TOTAL	1412		1888		1777	111

FELLOWSHIPS AND RESEARCH GRANTS

The Graduate School has recently been notified of the following grants for further study and research. A file with complete information about each grant is available in the Graduate School Office.

A. Aid for further graduate study:

1. Argonne National Laboratory appointments are available for thesis work in several science fields. Applications may be filed at any time but should allow a period of 6-8 weeks for consideration.
2. Oak Ridge Graduate Fellowships are given for thesis research in the sciences at Oak Ridge, Savannah River Laboratories or Puerto Rico Nuclear Center. Stipend is \$3,000 plus \$500 per dependent and a small travel allowance. Appointment is for 12 months. Applications are reviewed quarterly on or about 3/15; 6/15; 9/15; and 12/15.
3. Printing and Publishing Industry Graduate Fellowships will be given to two students in mathematics, chemistry, physics, or engineering who plan to seek employment at the professional level in the graphic arts industry. Stipends are \$3,000 and \$4,300 per year. Application should be made before February 7.
4. J. Spencer Love Fellowships for graduate study at the Harvard Business School are available to students whose homes are in the Southeast and who plan to return to that area for their careers. Stipends vary from \$1,000 to \$2,500. Application should be made before February 15.

B. Aid for faculty study and research.

1. Argonne National Laboratory appointments for a year of research are available in the engineering, physical, and life sciences. Salary is based on qualifications and experience with a minimum of \$9,900 a year. Six to eight weeks are required to process the application, which may be submitted at any time.
2. U.S. Government Postdoctoral Resident Research Associateships. These are given to provide young investigators an opportunity for advanced training in basic research in many fields. The annual stipend is \$9,980 plus a moving allowance. Application must be submitted by February 1. The grants are tenable at the following laboratories and research centers:

AGRICULTURAL RESEARCH SERVICE in the
U.S. DEPARTMENT OF AGRICULTURE
Pioneering or Basic Research Labs at:
Albany, California
Beltsville, Maryland
Lafayette, Indiana
New Orleans, Louisiana
Peoria, Illinois
Philadelphia, Pennsylvania
Plum Island, New York
Washington, D. C.

NATIONAL BUREAU OF STANDARDS
Boulder, Colorado
Washington, D. C.

AIR FORCE SYSTEMS COMMAND and
OFFICE OF AEROSPACE RESEARCH at:
Alamagordo, New Mexico
Bedford, Massachusetts
Dayton, Ohio
Rome, New York
San Antonio, Texas

NAVAL RESEARCH LABORATORY
Washington, D. C.

NAVAL WEAPONS LABORATORY
Dahlgren, Virginia

FELLOWSHIPS AND RESEARCH GRANTS (continued)

NAVAL MEDICAL RESEARCH INSTITUTE
Bethesda, Maryland

NAVY ELECTRONICS LABORATORY
San Diego, California

NAVAL ORDNANCE LABORATORY
White Oak, Silver Spring, Maryland

U.S. ARMY BIOLOGICAL LABS
Fort Detrick, Frederick, Maryland

PERSONAL MENTION

H. L. Hunter (A&S) has been appointed as advisor to students interested in the medical technology program.

H. L. Steele (AgEcon) will read a paper at the February 17-18 Fourth National Symposium on Dairy Marketing Development, to be held in Chicago.

O. B. Garrison (AgRes) will serve on the Southern Association Self-Study Visitation Committee to visit L.S.U. in April.

G. E. Stembridge (Hort) will return from military leave and resume his teaching and research duties on February 1.

W. C. Elrod (ME) has been granted a continuation of his leave to do doctoral study at the University of Michigan.

An article by C. H. Whitehurst (IM) appeared in the January edition of the USC Business and Economic Review.

W. C. Nettles (Ext) is chairman of the Southeastern Branch of the Entomological Society of America. The Society will hold its annual convention in Asheville, North Carolina, January 28-29.

L. D. Malphrus (AgEcon) was recently elected chairman of the Southern Regional Livestock Marketing Research Technical Committee.

Joe Sherman (Dev) has been selected by the Clemson Alumni National Council as one of five to receive the 1964 Distinguished Alumnus Award.

J. P. Rostron (CE) presented a paper on January 16 at the Washington, D. C., meeting of the Highway Research Board.

L. G. Rich (Eng) has been appointed to the Board of Directors of the American Association of Professors in Sanitary Engineering.





C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 3 No. 8

CLEMSON COLLEGE LIBRARY
SOUTH CAROLINA COLLECTION

February 1, 1964

CALENDAR: FEBRUARY 4-18

- Feb. 4 T Mr. Fred Wolfe, brother of Thomas Wolfe, will speak at 4:15 p.m. in the Physics Lecture Room.
- Feb. 4 T Basketball: Clemson v. Furman.
- Feb. 4 T Sage Club, 6:30 p.m., Clemson House.
- Feb. 5 W Laicos Club, 8:15 p.m., Clemson House.
- Feb. 5 W Newcomers Club, 8:00 p.m., Clemson House.
- Feb. 6-27 Exhibition of contemporary prints from Japan. An exhibit of one hundred contemporary prints from Japan. The work includes the medias of intaglio and wood cuts in color and black and white. Lee Gallery, Architecture Building.
- Feb. 6 Th Woman's Club, 3:30 p.m., Clemson House.
- Feb. 6 Th Dr. Eugene Merzbacher of the University of North Carolina will lecture on "Quantum Physics." Room 101 Physics, 4:00 p.m.
- Feb. 8 S Swimming: Clemson v. Maryland.
- Feb. 10 M Forum Club, 7:00 p.m., Chemistry Building Conference Room.
- Feb. 11-13 Religious Emphasis Week. Dr. Claud Evans of SMU will speak each evening at faculty forums. College Auditorium, 7:00 p.m.
- Feb. 11 T Faculty Senate meeting, 4:00 p.m., Olin Auditorium.
- Feb. 12 W Dr. David G. Gosslee will lecture on "Some Experiences with Fitting Nonlinear Models." Dr. Gosslee is with the Mathematics Division, Oak Ridge National Laboratory. Room M-101 Math Building. 3:00 p.m.
- Feb. 15 S Graduate School language examination date. 9:00 a.m., Room E-8 English Building.
- Feb. 18 T Fellowship Club, 6:30 p.m., Clemson House.

MINUTES OF THE FACULTY SENATE OF CLEMSON COLLEGE

The ninety-third meeting of the Senate of the Academic Faculty of Clemson College was held on Tuesday, January 14, 1964, in the auditorium of Olin Hall with President J. G. Dinwiddie, Jr., presiding. Having a quorum present, the meeting was called to order, and the reading of the minutes was dispensed with.

Professor A. H. Holt reported for the Admissions and Scholarship Committee. He announced that Mr. Vickery had informed him that there had been some discussion among the various colleges to de-emphasize final examinations, either by cutting them out entirely or holding them at the last class meeting. This is being pushed by some in the State and will be discussed at the State Registrar's meeting either in February or March. Mr. Vickery requested the Senate to give him its views on the matter.

President Dinwiddie announced that he had been informed that this problem would not come up until the March meeting and suggested that the members think about it and be ready at the next meeting to air their views on this subject.

There was no report from the Welfare Committee. President Dinwiddie announced that Dr. Barnett had reported the immunization program was very successful, and recommended that next year's program be started earlier.

Professor W. B. Barlage, Chairman, reported for the Policy Committee. He asked that, instead of action being taken on the proposed changes of the Constitution and By-laws of the Faculty and Faculty Senate, criticism and comments be made at this time which would be sent back to the committee for further work. He asked Professor C. M. McGee to act as Secretary for the committee.

Queries and suggestions arose as to the problem of membership and apportionment. After much discussion on these matters, Professor Barlage noted that all the criticisms had been directed at particular clauses in the proposed Constitution and By-laws dealing with mechanics only, but that no one had indicated whether in the final analysis, he would be for the change. He asked what the consensus of the group was on this. Someone pointed out that the merger of the Research Council with the Faculty Senate would follow this change. Therefore, the real problem which should be dealt with is the merger itself, first, and then the proposed changes in the Constitution and By-laws would be tackled. Professor Barlage was then asked that his committee prepare a debate on the subject of the merger to be presented at the next meeting.

There being no further business, the meeting adjourned.

Respectfully submitted,

Members Absent:

Campbell, T. A.

Flatt, J. L.

Hubbard, J. C., Jr.

King, D. A.

McHugh, C. M.

Susan Brown, Secretary

GRADUATE COUNCIL MINUTES

The Graduate Council met on January 22 and took the following actions:

- (1) Twenty-two candidates for Master's degrees and three candidates for the Ph.D. degree were approved for graduation.
- (2) A minor in Experimental Statistics at the doctoral level and a change in the requirements for a minor in that field at the Master's level were approved.
- (3) The rule covering residence requirements for advanced degrees was clarified. The definition found in the Graduate School Bulletin on page 31 is changed to read: An academic semester of residence is defined as a semester of enrollment in and the successful completion of a minimum of nine hours of course work or a combination of course work and research acceptable as its equivalent. Summer equivalents may be accumulated to count toward residence.

The candidate for the Ph.D. from Clemson must earn two years of residence under these conditions. At least one of these years must be spent in continuous, full-time resident study at Clemson after he is admitted to the Ph.D. degree program. A third year of residence is required but may be earned by taking eighteen hours of course work and/or research over a period longer than two semesters.

FACULTY BASIC RESEARCH COMMITTEE

The Faculty Basic Research Committee has received an allotment of \$2,000 from the Alumni Loyalty Fund, to become available July 1, 1964. An additional award from the National Science Foundation will be announced in May, available July 1.

Faculty members who need support for basic research projects they would like to undertake may request funds from the Committee. Application forms may be obtained from the Graduate School.

The Committee will hold its next meeting during the last week in February.

INSTITUTIONAL GRADUATE RECORD EXAMINATIONS

The Graduate Record Examinations Institutional Testing Program will be administered at Clemson on Tuesday, March 17. These examinations are required of all candidates for the award of the bachelor's degree in June 1964, August 1964, or January 1965.

ACADEMIC FACULTY DATA

As of February 1 the Academic Faculty numbers 324, exclusive of lecturers in religion and military science. By schools the numbers are Agriculture 91; Architecture 17; Arts and Sciences 128; Engineering 66; and Industrial Management and Textile Science 22.

Of the total faculty 168 (51.9%) hold the terminal degrees in their fields. By schools the Ph.D. (or equivalent) percentage is Agriculture 75.8; Architecture 64.7; Arts and Sciences 43.0; Engineering 43.9; and Industrial Management and Textile Science 18.2.

FINANCIAL REPORT: 1963 ALUMNI LOYALTY FUND

During 1963 a total of 3,599 people made gifts totaling \$109,240.65 to the Alumni Fund. It was the third highest income total the Fund has enjoyed since the reorganization of the alumni program in 1956. (The Alumni Fund received \$151,035 in 1962 and \$116,996 in 1961.)

In 1963 gifts totaling \$94,294.65 were unrestricted as to use and gifts totaling \$14,946 were restricted to specific educational programs. The Trustees of the Clemson Foundation met in January to make grants from the unrestricted portion of the 1963 Fund. After paying the year's operating expenses of the Alumni Association (\$35,711.78) and freezing the Association's operating reserve at \$50,000 by allocating \$8,352.09 for this purpose, the Foundation Trustees made the following grants:

Faculty Research and Development	\$12,500.00
Graduate Fellowship	10,000.00
R. F. Poole Scholarships	9,200.00
Alumni Professorships	4,500.00
Student Government	1,000.00
Permanent Endowment	13,230.98

AREA ACTIVE PARTICIPANTS IN 1963 ALUMNI FUND

The following 171 alumni and friends living in the Clemson area participated in the accomplishment of the 1963 Fund by making gifts of \$5.00 or more in 1963. (Non-alumni donors hold Associate Membership in the Alumni Association.)

Alumni

Frank C. Anderson, Sr.	George Armstrong	Charles A. Arrington
George Aull	Robert Banister	Melvin Barnette
Henry Barre	Joel Berly	Thomas Bethea, III
Dan Bickley	George Bonnette	Leonard Booker
William Bowen	Douglas Bradbury	James Brittain
W. Wright Bryan	Robert Burley	Ralph Cain
James Casey	Lewis Cato	Robert Chaplin, Jr.
Robert Christenberry	Bruce Cloaninger	George Coakley
James Cochran	Herbert Cooper	J. R. Roy Cooper
J. Clinton Cook, Jr.	Edward Cook	Walter Cox
James Craig	Richard Crowther	Milton Crum, Jr.
Francis Dean	Joe Douthit	Dorothy Dunkelberg
Drayton Earle	James Edwards	Robert Edwards
James Eleazer	Marvin C. Ellison, Ret.	Alvon Elrod
William Epps	Clifford Fain	Charles H. Ferguson
Roy Ferree	John Ford, Jr.	Thomas E. Gioiosa
John Goodman	William Gray	Judson Hair
Alexander Hammond	George Hardy, Jr.	Clifton Harkey
Louis Henry	Baxter Hodges	Wylie Hogue, Jr.
Gregory Hughes	Hugh Jameson	Frank Jervey
James Johnson, Jr.	Champ Jones	George Jones
Jess Jones	Joe Jones	Robert Jones
Mark Kay	Bryan Keller	Willis King

AREA ACTIVE PARTICIPANTS IN 1963 ALUMNI FUND (continued)

Alumni

John LaGrone	Joe Lanham	Evans LaRoche
William Latimer	Howard Lee, Jr.	Henry Lefort
Charles E. Littlejohn, Sr.	Charles E. Littlejohn, Jr.	Samuel McDowell
J. Banks McFadden	H. Davis McGregor	H. C. "Bill" McLellan, Jr.
Covington McMillan	T. L. Mack	John Marshall
Campbell Martin	Richard Mattox	G. E. Metz
Thomas Millford	Robert Mixon	James Monroe
George Moore	Carl Nettles	Edward Olson
Mary Olson	Lawrence Pace	Thomas Perry, Jr.
C. Allen Pettigrew	Phillip Prince	Sam Rhodes
Columbus Rochester	Roy Rochester	John Rodgers
Ernest Rogers, Jr.	James Sams, Jr.	William Scaife
T. L. Senn	Joseph Sherman	Hoke Sloan
Fletcher Smoak, Jr.	Absalom Snell	Thomas Stewart
S. C. Stribling	Milford Sutherland	B. J. Todd
Kenneth Vickery	Joseph Wallace	J. V. Walters
William Washington	David Watkins	Hubert Webb
William Whitten, Jr.	John Wigington	Paul Williamon
John Williams	Samuel Williams	Bratton Williams
James Williamson, Jr.	Eugene Willimon	Horace Willis
Betts Wilson	Virgil Wilson	Victor Wray

Non-Alumni

Graydon W. Brandt	Floyd I. Brownley, Jr.	Marlin Bruner
S. J. L. Crouch (H)	Donald D. Curtis (H)	O. W. Deason
S. B. Earle (H)	Robert L. Edwards	Thomas D. Efland
A. J. Fear	John Gentry	Ben E. Goodale (H)
Claud B. Green	James E. Halpin	Kenny R. Helton
Trescott N. Hinton	James H. Hobson	Harriet R. Holman
Albert H. Holt	P. B. Holtzendorff, Jr. (H)	Frank Howard
Howard L. Hunter	Victor Hurst	Mrs. F. Marion Kinard (H)
Everett Laitala	Joseph Lindsay	Charles M. McGee, Jr.
Hugh H. Macaulay, Jr.	Andrew C. Mathews	John E. Miller
Betty Moorman	A. Wood Rigsby	Mrs. Grace W. Schilletter
Dawson C. Sheldon	Hooper C. Spurlock	Thomas A. White (H)
Jack K. Williams	James P. Winter	Milner B. Wilson, Jr.

(H) indicates Honorary Member of Alumni Association

1956-63 FINANCIAL REPORT
(The Eight Years Since Reorganization of the Alumni Office)

YEAR	Total Income	Program Expenses					"Residue"
1956	-	-	-	-	-	-	21,728.27
1957	-	-	-	-	-	-	23,287.85
1958	-	-	-	-	-	-	31,588.80
1959	-	-	-	-	-	-	49,206.91
1960	-	-	-	-	-	-	72,065.35
1961	-	-	-	-	-	-	75,253.98
1962	-	-	-	-	-	-	109,175.59
1963	-	-	-	-	-	-	73,728.87
TOTALS	\$ 697,988.04		\$ 241,952.42				\$ 456,035.62

GRANTS FROM UNRESTRICTED FUNDS

	1956-58	1959	1960	1961	1962	1963	TOTAL
Alumni Graduate Fellowships	\$ 3,600.00	\$ 6,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 49,600.00
Faculty Research & Development	2,400.00	7,650.00	10,360.00	9,500.00	6,156.00	12,500.00	48,856.00
R. F. Poole Scholarships	206.94	4,000.00	6,000.00	8,000.00	10,000.00	9,200.00	37,406.94
Alumni Professorships	-	-	-	3,000.00	4,500.00	4,500.00	12,000.00
Library	6,801.12	4,000.00	2,500.00	-	-	-	13,301.12
Student Government	-	500.00	1,000.00	1,000.00	1,000.00	1,000.00	4,500.00
Foundation Loan Fund	20,000.00	-	-	-	-	-	20,000.00
Loyalty Fund Reserve	5,000.00	7,715.00	8,410.00	8,800.00	7,130.00	8,352.09	45,407.09
Permanent Endowment	-	7,773.35	10,057.78	11,067.48	5,001.32	13,230.78	47,130.71
TOTALS	\$38,008.06	\$37,638.35	\$48,617.78	\$51,367.48	\$43,787.32	\$58,782.87	\$278,201.86

RESTRICTED INCOME

	1956-58	1959	1960	1961	1962	1963	TOTAL
Permanent Endowment	\$36,567.05	\$ 3,610.00	\$ 2,915.00	\$ 1,165.00	\$ 4,458.25	\$ 685.00	\$ 49,400.30
Other Restricted Gifts	2,624.81	7,958.56	19,937.57	22,721.50	60,930.02	14,261.00	128,433.46
TOTALS	\$39,191.86	\$11,568.56	\$22,852.57	\$23,886.50	\$65,388.27	\$14,946.00	\$177,833.76

AVERAGE ALUMNI GIFT

	1955	1956	1957	1958	1959	1960	1961	1962	1963
	\$7.09	\$8.16	\$9.62	\$12.64	\$23.11	\$26.91	\$30.48	\$40.09	\$29.75

INFORMAL RECEPTION FOR BRYANS, JERVEYS

President and Mrs. Edwards will have an informal reception on Sunday, February 9, from 4 to 6 p.m., at the Clemson House (Purple-Gold rooms), honoring Mr. and Mrs. Wright Bryan and Mr. and Mrs. Frank J. Jervey. No formal invitations are being issued but members of faculty and staff, and their wives, and people of the community are cordially invited.

RELIGIOUS EMPHASIS WEEK

Religious Emphasis Week convocations will be held the evenings of February 11, 12 and 13. The public is invited to participate with Clemson students, faculty and staff members. Separate convocations, the first at 6:30 p.m. and the second at 7:30 p.m., will be held in Tillman Hall Auditorium each night, permitting all interested persons to attend both.

"Contemporary Idolatries at War with Faith" is the theme of this year's session. The Rev. Charles L. Palms, associate editor of "Catholic World," a journal expressing the Catholic viewpoint, will conduct the 6:30 meeting each evening. In charge of the 7:30 convocation each night will be Dr. J. Claude Evans, chaplain to the University, Southern Methodist University, Dallas, Texas.

Following the assemblies, student forums will be conducted in the dormitories by some 30 area pastors and laymen. Concurrently, the convocation leaders will meet in public forum at the YMCA where those interested will be welcome.

PERSONAL MENTION

Richard J. Calhoun (English) has been invited to lecture on recent literary criticism before the faculty and graduate students of the Graduate Institute of Liberal Arts at Emory University on February 18.

Dr. Rupert Taylor (English-retired) died in Arkansas on January 17. He was for 31 years a teacher at Clemson, respected and admired by all who knew him. He was a devotee of Shakespeare.

J. T. Long (EE) will attend a symposium on Digital Computing in Engineering and Research at the Bell Telephone Laboratories in Holmdel, N. J., on January 30 and 31.

C. E. Littlejohn (ChE) has been chosen by the Engineers' Council for Professional Development to be a member of the team inspecting Manhattan College's School of Engineering for accreditation.

Joseph H. Moore and Joseph P. Rostron (CE) were elected Directors of the South Carolina Section of American Society of Civil Engineers at the Annual Meeting held in Columbia on January 10.

PERSONAL MENTION (continued)

W. A. King (Dairy Sci) has been awarded a Merit Certificate by the American Grassland Council for outstanding work in grassland research.

B. K. Webb (Ag Engr) has been granted a continuation of his leave to do doctoral study at N. C. State.

J. K. Reed (Ento) chaired a session at the January 27-28 meeting of the SE Branch, Entomological Society of America, at Asheville, N. C. E. W. King and A. S. Tombes (Ento) presented papers at the meeting.

R. H. Hunter and J. T. Acorn (Arch) are represented in the National Invitational and Juried 159th Annual Exhibition, Pennsylvania Academy of Fine Arts, Philadelphia, Pennsylvania.

W. F. Beckwith (ChE), Harold N. Cooledge (Arch), J. T. Long (EE), Walt Sanders (CE), A. W. Snell (Ag Engr), and M. S. Steadman (English) earned their Ph.D. degrees at the conclusion of the first semester or current quarter. Hal Cooledge's degree is from the University of Pennsylvania; Jim Long's degree is from Georgia Tech; Ab Snell did his work at N. C. State; Mark Steadman finished requirements at Florida State; Bill Beckwith's degree is from Iowa State; and Walt Sanders finished at Johns Hopkins.

Elmer Olsen (Ext) has been granted leave to do graduate study at West Virginia University.

W. B. Clement (EG) has returned from graduate study leave.

Sixteen of the Agriculture faculty and four Agricultural graduate students will read papers at the February 3-5 Atlanta meeting of the Association of Southern Agricultural Workers. Faculty who will read papers are: in entomology, R. C. Fox; in agronomy, T. C. Peele and C. E. Bardsley; in agricultural economics, J. M. Stepp; in dairy science, Glen O'Dell, R. W. Henningson, J. J. Janzen, J. T. Lazar, Jr., William Chalupa and W. A. King; in poultry science, J. F. Stephens; in horticulture, C. E. Gambrell, Jr., E. T. Sims, Jr., and W. L. Ogle; in animal science, Dale Handlin; and plant pathology, J. E. Halpin. Graduate students who will read papers are J. B. Aitken, W. P. Cook, D. O. Ezell, and Claude Thomas.



C L E M S O N

Newsletter

NOT FOR PUBLICATION

CLEMSON COLLEGE LIBRARY
SOUTH CAROLINA COLLECTION

Vol. 3 No. 9

February 15, 1964

CALENDAR: FEBRUARY 17-MARCH 5

- Feb. 17-27 Exhibition of 100 contemporary prints from Japan. The work includes the medias of intaglio and wood cuts in color and black and white. Lee Gallery, Architecture Building.
- Feb. 18 T Fellowship Club, 6:30 p.m., Clemson House.
- Feb. 19 W Laicos Club, 8:15 p.m., Clemson House.
- Feb. 19 W Newcomers Club, 8:00 p.m., Clemson House.
- Feb. 20 Th Mr. Harold J. Gibbs, Chief of the Soils Engineering Branch in the Division of Research, Bureau of Reclamation, Denver, Colorado will speak on "Research Developments in Soil Mechanics in the Bureau of Reclamation," at 7:00 p.m., Civil Engineering Auditorium.
- Feb. 21 F Basketball: Clemson v. Wake Forest
- Feb. 24 M Forum Club, 7:00 p.m., Chemistry Building Conference Room.
- Feb. 25 T Basketball: Clemson v. U.S.C.
- Feb. 25 T Mr. W. Gladden Smoke, U.S. Army Engineer Research and Development Laboratories, will lecture on "Fuel Cell Research," 7:00 p.m., Room 100, Earle Hall.
- Feb. 26 W National Players present Shakespeare's "Taming of the Shrew." 8:15 p.m., College Auditorium.
- Feb. 26 W Graduate Wives, 8:00 p.m., Clemson House.
- Feb. 28 F Basketball: Clemson v. Maryland.
- Feb. 29 S Basketball: Clemson v. Virginia.
- Mar. 2 M Concert: American Ballet Theatre, 8:00 p.m., Field House.
- Mar. 3 T Sage Club, 6:30 p.m., Clemson House.
- Mar. 3 T Dr. F. C. Alley, Department of Chemical Engineering, will discuss air pollution at the Sigma Xi noon meeting at the Clemson House.
- Mar. 5 Th Masonic Lodge, 7:30 p.m.
- Mar. 5 Th Woman's Club, 3:30 p.m., Clemson House.

MINUTES OF THE FACULTY SENATE OF CLEMSON COLLEGE

The ninety-fourth meeting of the Senate of the Academic Faculty of Clemson College was held on Tuesday, February 11, 1964, in the auditorium of Olin Hall with President J. G. Dinwiddie, Jr., presiding. Having a quorum present, the meeting was called to order, and the reading of the minutes was dispensed with. However, the following corrections were made to the minutes: (1) Your secretary had listed Professors J. C. Hubbard, Jr., and C. M. McHugh as being absent from the last meeting. This they were not. (2) In paragraph 6 of the minutes, the phrase reading, "the merger of the Research Council with the Faculty Senate," should have read, "the merger of the Research Faculty with the Academic Faculty Senate."

President Dinwiddie welcomed two new members, Professors John Sullivan and John Miller, who are filling vacancies. President Dinwiddie suggested that in lieu of calling a meeting of the Committee on Committees, he would assign Professor Sullivan to the Admissions and Scholarship Committee, the position held by Professor D. A. King, and Professor Miller to the Policy Committee, the position held by Professor E. P. Stillwell. This suggestion was acceptable to the membership.

President Dinwiddie introduced Mr. John Gentry who gave an explanation of the proposed changes in the State retirement policy. He passed to the members an informal detailed statement which included how the changes would effect the present policy and the new benefit formula recommended in the proposal. Mr. Dinwiddie reported that President Edwards had announced at the last meeting of the Educational Council that those employees who had drawn no retirement check by January 14, 1964 would have the option of qualifying for the new plan. (Assuming, of course, that the new plan is passed this session of the Legislature.)

President Dinwiddie then introduced Dean J. K. Williams who was asked to speak on the Administration's point of view as to a merger of the Research Council and the Academic Faculty Senate.

At the outset, Dean Williams made it clear that the Administration has no point of view on the subject. The Administration's interest in this matter has only been kindled because of its knowledge that a possible merger is being worked on in the Senate. Dean Williams stated further that he, of course, had his own personal views and that he could see valid arguments against as well as for a merger, but, as far as he was concerned, he could not and would not recommend what the Senate should do or not do.

He further stated that if the Senate was acting under the impression that either his office or the Administration was desiring such a move, or that some sort of merger must be accomplished, this was never intended. He noted that if merger was not accomplished he would of necessity work closer with the Research Council than he had in the past.

Dean Williams gave some figures showing the relationship between the academic faculty and research. The figures were broken down according to the various schools. There is a sum total of 142 research equivalents and 261 teaching equivalents at Clemson College. Out of 142 research equivalents, 120 are found in the School of Agriculture.

Dean Williams discussed the budgeting system and how research is related to it. There will be research-faculty people other than Agriculture. Agriculture is not growing as other fields are. There can be no separation between faculty and research. Dean Williams stated further that he wants to erase any lines drawn between the two; but, as far as his own opinions of whether there should be a merger of the Research Council and Academic Faculty Senate, he would not venture to advise.

MINUTES OF THE FACULTY SENATE OF CLEMSON COLLEGE (continues)

Dean Williams announced that there was a proposal by the South Carolina State Supported College Presidents' Sub-committee of Deans to establish a uniform grading system throughout the state colleges of A, B, C, D, F, WP and WF.

He also announced that the question of extending Educational TV to the state Colleges' Educational Programs had arisen, and that it was recommended that the Sub-committee of Deans work on this problem. He requested that the Senate think on this, as he would like to have the faculty's views.

Dean Williams also referred to a study being made to change the calendar in order for Fall Semester to end prior to Christmas, and requested an opinion on this.

Professor T. A. Campbell, Chairman of the Admissions and Scholarship Committee reported for the Committee and submitted the following recommendations:

#1

The Admission and Scholarship Committee of the Faculty Senate recommends that the Senate ask the Administration to establish the policy that no test of any kind--except laboratory quizzes, which shall be given on the last full day of the laboratory--shall be given during the academic week prior to the beginning of final examinations.

After a brief discussion, it was decided to put this recommendation to a vote at the next meeting.

#2

The Admission and Scholarship Committee of the Faculty Senate recommends that the existing class attendance regulations be amended to require that all group absences for non-academic activities shall be first approved by the office of the Academic Dean of the College before being implemented by the Dean of Student Affairs--the consensus of the Committee being that the Dean of the College is in the best position to judge the value of such absences to the academic welfare of the students.

After a brief discussion, it was decided to put this recommendation to a vote at the next meeting.

President Dinwiddie announced he had received a letter from the Student Senate regarding the possibility of night classes. This letter was referred to the Admissions and Scholarship Committee.

President Dinwiddie also announced he had received a letter from a faculty member regarding the retirement system. This letter was referred to the Welfare Committee.

There being no further business, the meeting adjourned.

Respectfully submitted,

MEMBERS ABSENT:

Davis, L. H.

McGee, C. M.

Lewis, A. D.

Susan Brown, Secretary

DATA ON THIS YEAR'S FRESHMAN CLASS

The Registrar's office has prepared for the faculty the following tables of information concerning the current freshman class.

1. CLASS RANK OF 1963 FRESHMAN CLASS

Secondary School Class Rank	Number	Per Cent
Top Fifth	347	30.3
Second Fifth	362	31.6
Third Fifth	277	24.2
Fourth Fifth	122	10.6
Bottom Fifth	28	2.4
Not Available	10	0.9
Total	1146	100.0

2. COLLEGE ENTRANCE EXAMINATION BOARD SCORES

Score Range	Scholastic Aptitude Test		Ach. Test	Total SAT Score	
	Verbal	Math	Inter. Math *	Score Range	Number
200-249	1	0	0	400-499	0
250-299	19	0	5	500-599	0
300-349	131	6	26	600-699	0
350-399	234	58	101	700-799	145
400-449	247	168	225	800-899	270
450-499	225	293	306	900-999	302
500-549	151	250	199	1000-1099	228
550-599	73	198	131	1100-1199	123
600-649	37	107	67	1200-1299	59
650-699	23	46	30	1300-1399	17
700-749	5	18	5	1400-1499	2
750-799	0	2	0	1500-1599	0

*A total of 51 entering freshmen failed to complete the achievement test and were placed automatically in remedial mathematics.

DATA ON THIS YEAR'S FRESHMAN CLASS (continued)

3. MAJOR COURSE FOR WHICH ENROLLED

School of Agriculture		School of Engineering	
Agriculture (major undeclared)	8	Ceramic Engineering	26
Agricultural Economics	5	Chemical Engineering	65
Agricultural Education	11	Civil Engineering	103
Agricultural Engineering*	11	Electrical Engineering	162
Agronomy	5	Industrial Education	2
Animal Science	9	Industrial Engineering	28
Biology	14	Mechanical Engineering	132
Dairy Science	6	Metallurgical Engineering	2
Entomology	3	TOTAL	520
Food Technology	0		
Forestry	31	School of Industrial Management	
Horticulture	8	and Textile Science	
Poultry Science	1	Industrial Management	103
Pre-Veterinary	25	Textile Chemistry	16
TOTAL	137	Textile Management	25
		Textile Science	7
		TOTAL	151
School of Architecture		*Jointly administered by the Schools of Agriculture and Engineering.	
Architecture	74		
Building Construction	11		
TOTAL	85		
School of Arts and Sciences			
Applied Mathematics	24		
Arts and Sciences (B. A. Degree)	107		
Chemistry	16		
Physics	20		
Pre-Medicine	86		
TOTAL	253		

4. GEOGRAPHIC DATA

<u>State</u>	<u>Number</u>	<u>State</u>	<u>Number</u>
Alaska	1	New Jersey	50
Alabama	7	New York	31
Arizona	1	North Carolina	62
Arkansas	2	Ohio	5
Connecticut	15	Pennsylvania	30
Delaware	2	South Carolina	767
Florida	34	Tennessee	7
Georgia	62	Texas	2
Louisiana	1	Utah	1
Maryland	22	Virginia	22
Massachusetts	12	West Virginia	1
Michigan	3	Wisconsin	1
Missouri	1	District of Columbia	1
Montana	1	Canal Zone	2

RESEARCH GRANTS AND FELLOWSHIPS

The following research grants and fellowships grants have been announced since the last issue of the Newsletter:

From NIH to A. S. Tombes (Ento), \$7,800 for a study of "Physiological Consequences of Estivation in Insects."

From the S. C. Plant Food Education Society, \$500 to the Agronomy Department for the publication of "Plant Science News," a research review.

From Thomas J. Lipton, Inc., \$15,000 to the Agricultural Experiment Station for research in the production of tea.

From the Savannah Sugar Refining Corporation, \$1,500 to Animal Sciences for research in animal nutrition.

From the Norwich Pharmacal Company, \$1,000 to Dairy Science for "Factors Affecting Fertility in Dairy Cattle"; and \$5,000 to Poultry Science for "The Evaluation of U Compound for Effect Against Coccidia and Certain Other Micro-organisms."

From the Shell Chemical Corporation, \$2,000 to Entomology for insecticide research.

From the National Academy of Sciences, \$30,000 to Civil Engineering for "rapid test methods for field control of construction."

From the J. E. Sirrine Textile Foundation, a sum to support initial fellowships in the Ph.D. program in chemistry with a major in textile chemistry.

ANNUAL RE-WORK PERIOD--TRAVELERS INSURANCE GROUP

The annual re-work period for the Travelers Insurance Group will be March 1-31, 1964. Company representatives will be on campus during this period and will be available to explain the Travelers plans and coverage to any interested employee. Visits will be made to any department desiring such and at times most convenient to the respective departments.

Any present members desiring to make changes to fit their individual needs may do so at this time. Employees presently enrolled and desiring no changes will be automatically continued and need not contact the representatives at this time. Anyone who desires to obtain this type of insurance coverage must make application during their first 31 days of employment, or during this re-work period.

If you wish to make an appointment with one of the representatives, you may do so by contacting Mr. W. J. Stamey, Personnel Division, Extension 365.

IM-TS SUMMER COURSES FOR INDUSTRY

For the seventh consecutive summer the School of Industrial Management and Textile Science will offer Courses for Professional Development. Some seven different courses, of one or two weeks duration, will be offered from June 15 through August 14, 1964.

A total of 405 persons from industry have completed a course during the past six summers. Those attending were from several states and a few foreign countries. Many industrial plants were represented.

Professor C. V. Wray is coordinator of the program.

M.E. ADDS ASSISTANT PROFESSOR

Dr. William L. Amminger of Vienna, Austria, joined the mechanical engineering faculty as an assistant professor on February 1. His undergraduate college was the Technical University of Vienna and his D. Sc. was earned at Washington University in St. Louis. He has had five years teaching experience at Washington University in addition to seven years experience as project engineer and senior design engineer with industry in Germany and Switzerland.

Dr. Amminger is married and has one child.

PERSONAL MENTION

Forrest C. Alley and R. C. Harshman (ChE) have been granted tenure as members of the academic faculty.

R. W. Henningson (DySci) has been appointed as Associate Referee in Cryoscopy of Milk, with the Association of Official Agricultural Chemists.

H. H. Macaulay (Adm) has been asked to serve as a member of the NSF-National Academy of Sciences review board for graduate fellowships.

J. K. Williams (Adm) will serve during 1964 as a member of the Southern Association of Colleges and Schools Committee on Standards and Reports for Senior Colleges.

L. G. Rich (Engr) has been advised that the General Electric Foundation has awarded the School of Engineering a grant of \$2,500 for 1964-65. The grant is unrestricted.

John Miller (Phys) has been elected to the Faculty Senate to fill the term vacated by E. P. Stillwell. John Sullivan (Math) has been elected as temporary replacement for D. A. King, who will be on leave this semester to do graduate study.

Waldron Bolen (Hist) is on sabbatical leave this semester. He will continue his research on German foreign policy (pre World-War II).

May Ringold (Hist) has been asked to write on "The Confederacy: Social and Economic Conditions" for inclusion in a National Civil War Centennial Commission bibliography.



C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 3 No. 10

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

March 1, 1964

CALENDAR: MARCH 2-17

- March 2 M Concert: American Ballet Theatre, 8:00 p.m., Field House.
- March 3 T Sage Club, 6:30 p.m., Clemson House.
- March 3 T Dr. F. C. Alley, Department of Chemical Engineering, will discuss air pollution at the Sigma Xi noon meeting at the Clemson House.
- March 4 W Laicos Club, 8:15 p.m., Clemson House.
- March 4 W Newcomers Club, 8:00 p.m., Clemson House.
- March 5 Th Masonic Lodge, 7:30 p.m.
- March 5 Th Woman's Club, 8-10 p.m., Hobby's Fair, Clemson House Ballroom
- March 6-25 7TH ANNUAL HIGH SCHOOL ART SHOW: The School of Architecture and the Clemson Architectural Foundation present a competitive art show of visual art work submitted by high school students. This creative work represents all phases of individual development in the high school student. Lee Gallery, Architecture Building.
- March 9 M Forum Club, 7:00 p.m., Chemistry Building Conference Room.
- March 9 M Dr. F. L. Wellman, Plant Pathologist---USDA (retired) will talk on some phase of Plant Diseases, 4:10 p.m., Room 222, Long Hall.
- March 9 M Dr. W. Burnett Buir, Franklin Institute, will talk on "deHaas-Van Alphen Effect in Zinc Alloys," 4:00 p.m., Room 101 Physics.
- March 9-10 Committee from Engineers' Council for Professional Development to visit campus.
- March 10 T Faculty Senate, 4:00 p.m., Olin Hall.
- March 10 T Professor George F. Sowers, Georgia Institute of Technology, will lecture on "Engineering Foundations," 7:00 p.m., Civil Engr. Auditorium.
- March 10 T Dr. Trevor Evans, Chairman of the Department of Mathematics, Emory University, will lecture on "Decision Problems in Algebra," 3:00 p.m., Room M-101, Math Building.
- March 11 W Dr. Trevor Evans will lecture on "Sets, Logic, and Switching Circuits," 11:00 a.m., Chemical Engr. Auditorium.
- March 11 W Dr. Trevor Evans will lecture on "Recent Work in the Foundations of Geometry," 3:00 p.m., M-101, Math Building.

CALENDAR: (continued)

March 11 W Graduate Wives, 8:00 p.m., Clemson House.

March 11 W Concert: Houston Orchestra with Sir John Barbirolli conducting, 8:00 p.m., Field House.

March 12 Th Mr. Brown Mahon, Chairman of the Board, Carolina Federal Savings and Loan Association, will lecture on "Community Responsibility," 2:00 p.m., Sirrine Hall Auditorium.

March 12 Th Dr. Daniel W. Hollis, Professor of History, University of South Carolina, will lecture on "Ben Tillman and Higher Education in South Carolina." 4:00 p.m., Olin Hall Auditorium.

March 12 Th Dr. Francois Mergen, Professor of Forest Genetics, Yale University, will lecture on "A Realistic Look at the Selection of Superior Trees," 10:00 a.m., Room A-101, Plant and Animal Science Building. At 2:00 p.m., in the same room, he will lecture on "The Place of Genetics in Forest Management."

March 16 M Dr. Ralph G. Pearson, Northwestern University, will lecture on "Mechanism of Substitution Reactions in Metal Complexes," 4:00 p.m., Room 118, Brackett Hall.

March 17 T Fellowship Club, 6:30 p.m., Clemson House.

RESEARCH AND STUDY GRANTS

Research and study grants to the College since February 15 include:

From Hercules Powder, \$1,000 to the Horticulture Department for research on turf grasses.

From the Tennessee Corporation, \$1,000 to the Department of Agronomy and Soils for research involving minor elements.

From N.I.H., \$7,800 to A. S. Tombes (Ento) for a study of estivation in insects.

From USDA, \$4,200 to the Agricultural Economics Department for research involving consumer acceptance of certain milk products.

From NSF, \$5,600 to the Department of Chemistry to support undergraduate research during the summer of 1964. This program supports research by undergraduates who rank high in academic achievement. Research will be in inorganic, organic, and physical chemistry. The grant provides a stipend for each student in the program, and pays for all laboratory supplies used.

From NSF, \$9,000 to Dr. and Mrs. G. M. Armstrong (Bot-ret) for research in systematic biology.

LEGISLATIVE COMMITTEE RECOMMENDS CHANGES IN STATE RETIREMENT SYSTEM

Six members of the 1963 General Assembly of South Carolina (Senators Dennis, Morrah and Waddell; Representatives Rogers, Williams and H. P. Smith) reported January 14, 1964 to the Legislature on a year-long study of the State Retirement System, and recommended several major changes in its operation.

The South Carolina Retirement System was established in 1945, and combined with Social Security in 1955. The proposed changes for 1964-65 may prove to be as significant as the addition of Social Security. There are three major recommendations:

(1) To increase the rate of contributions from each member by 1% and increase the State's matching contributions. (Effective July 1, 1964, members will contribute 4% on earnings up to \$4,800 in each calendar year; 6% on any earnings over \$4,800. No contributions are made to Social Security on earnings in excess of \$4,800 per year.

(2) To determine the maximum retirement allowance at age 65 for each member by an "average final salary" formula, rather than the "money purchase" formula which is used at present. An employee scheduled to retire on or after July 1, 1964 will be able to estimate his own monthly benefit, easily, by the following steps:

(a) Estimate the average salary of his highest-paid five consecutive fiscal years of the last ten before retirement at age 65. (b) Find 1% of this average, up to \$4,800. (c) If any of this average exceeds \$4,800, add 1½% of the remainder.

(d) Multiply this sum by the number of years of creditable service the member expects to complete in South Carolina by age 65. (e) Divide the product by 12 to find his maximum monthly allowance. (NOTE: If a member elects an optional settlement, or if he elects to retire before age 65, the allowance will be less than his maximum).

(3) The third major recommendation of the Committee guarantees to members of the System enrolled prior to July 1, 1964 that none of their present privileges will be lost. At retirement, these members will have their allowances calculated by the new formula and by the old, and will be paid the larger amount. (New members enrolled after June 30, 1964, will be paid by the new formula.)

More detailed information will be issued earlier in March to all Clemson employees through official administrative channels. The report has been approved by the State Budget and Control Board, and was introduced in the General Assembly as Bill H-1970. If it becomes State Law, it will be effective on July 1, 1964.

EGG AND ART EXHIBITION

The annual Egg and Art Exhibition will be held in the Food Industries Auditorium March 20-22. For information about the exhibition, call the Poultry Department, extension 222.

CHEMISTRY AND TC TO SPONSOR PH.D. PROGRAM

The Graduate Council and the College Curriculum Committee have approved a proposal by the Department of Textile Chemistry and the Department of Chemistry and Geology to offer a doctoral program in which the research will be carried out in some area of textile chemistry and the course requirements will be taken from current offerings of the two departments.

The present mechanical procedures of the Chemistry Department will be used in that the candidate will be expected to satisfy requirements in four fields of chemistry. For the textile chemistry major, however, textile chemistry may be substituted for either inorganic or analytical chemistry. Physical and organic will be required. All usual requirements of the Graduate School will have to be met by the candidate.

Research will be in a fundamental area, although one which might be somewhat closer to practical utilization than some of the current research underway in the Chemistry Department. No effort will be made to undertake any research other than theoretical work on a level with doctoral research currently in progress at comparable institutions.

ALGERNON SYDNEY SULLIVAN AWARD

The Honors and Awards Committee invites all faculty and staff members to submit nominations for the non-student recipient of this year's Sullivan Award, which will be made on Honors and Awards Day, May 6, 1964. The award is described on page 71 of The 1962-63 Clemson College Record.

The nominations should be made by March 25 and sent directly to C. B. Green, 28 Tillman Hall, or to one of the School members of the Committee: J. T. Lazar and T. V. Wilson (Agriculture); Vernon Hodges (Architecture); H. E. Vogel (Arts and Sciences); A. D. Lewis and J. C. McCormac (Engineering); J. J. Porter and J. V. Walters (IM and TS). Each nomination should be accompanied by a statement of recommendation.

Previous non-student recipients of the Sullivan Award have been:

1951 - C. E. Daniel
1952 - J. E. Hunter
1953 - M. E. Bradley
1954 - D. W. Daniel
1955 - S. R. Rhodes
1956 - P. B. Holtzendorff, Jr.
1957 - S. J. L. Crouch
1958 - A. B. Bryan
1959 - Helen Coker
1960 - C. C. Bennett
1961 - J. D. Lane
1962 - B. E. Goodale
1963 - R. M. Cooper

PRE-PHARMACY CURRICULUM

The College Curriculum Committee has approved a two-year pre-pharmacy curriculum to be administered by the School of Arts and Sciences. Dean H. L. Hunter will serve as advisor. Since the program was approved too late for inclusion in the forthcoming College Catalog, it is printed here for faculty reference.

Pharmacy is a five-year program. The student who does pre-pharmacy here will, as a rule, transfer to the S. C. Medical College. His degree, once he completes the final three years, will be in Pharmacy and will be awarded by the College of Pharmacy, not by Clemson.

PRE-PHARMACY CURRICULUM

Freshman Year

First Semester

Ch 101 General Chemistry	4	(3,3)
Engl 101 Engl. Composition	3	(3,0)
Hist 101 American History	3	(3,0)
Math 101 Mathematical Analysis	3	(3,0)
Modern Language	3	(3,0)
AS or MS -- Basic	1	(2,1)
	<u>17</u>	

Second Semester

Bot 101 General Botany	4	(3,3)
Ch 102 General Chemistry	4	(3,3)
Engl 102 Engl. Composition	3	(3,0)
Math 102 Mathematical Analysis	3	(3,0)
Modern Language	3	(3,0)
AS or MS -- Basic	1	(2,1)
	<u>18</u>	

Sophomore Year

Phys 201 Gen. Physics	3	(3,0)
Phys 203 Gen. Physics Lab.....	1	(0,3)
Engl 203 Survey of Engl. Lit...	3	(3,0)
Hist 102 American History	3	(3,0)
Modern Language	3	(3,0)
Zool 101 Gen. Zoology	3	(3,0)
Zool 103 Gen. Zool. Lab.....	1	(0,3)
AS or MS -- Basic	1	(2,1)
	<u>18</u>	

Phys 202 Gen. Physics	3	(3,0)
Phys 204 Gen. Physics Lab.....	1	(0,3)
Econ 201 Prin. of Economics ...	3	(3,0)
Engl 204 Survey of Engl. and Amer. Lit.....	3	(3,0)
Modern Language	3	(3,0)
AS or MS -- Basic	1	(2,1)
Electives	<u>3</u>	
	<u>17</u>	

ENROLLMENT BY MEN AND WOMEN--FULL-TIME AND PART-TIME

Second Semester 1963-1964

Classification	Men			Women			Total		
	Full Time	Part Time	Total	Full Time	Part Time	Total	Full Time	Part Time	Total
1st Sem. Freshman	683	4	687	27	4	31	710	8	718
2nd Sem. Freshman	812	7	819	33	0	33	845	7	852
Sub-Total	1495	11	1506	60	4	64	1555	15	1570
1st Sem. Sophomore	284	6	290	11	1	12	295	7	302
2nd Sem. Sophomore	549	7	556	10	0	10	559	7	566
Sub-Total	833	13	846	21	1	22	854	14	868
1st Sem. Junior	190	1	191	5	2	7	195	3	198
2nd Sem. Junior	414	7	421	11	0	11	425	7	432
Sub-Total	604	8	612	16	2	18	620	10	630
1st Sem. Senior	374	5	379	6	0	6	380	5	385
2nd Sem. Senior	376	10	386	5	1	6	381	11	392
Sub-Total	750	15	765	11	1	12	761	16	777
1st Sem. Fifth Year	5	0	5	0	0	0	5	0	5
2nd Sem. Fifth	6	0	6	0	1	1	6	1	7
Sub-Total	11	0	11	0	1	1	11	1	12
Total	3693	47	3740	108	9	117	3801	56	3857
Graduates	124	106	230	10	12	22	134	118	252
Postgraduates	6	13	19	1	4	5	7	17	24
Unclassified	0	7	7	1	11	12	1	18	19
Total	130	126	256	12	27	39	142	153	295
Grand Total	3823	173	3996	120	36	156	3943	209	4152

ENROLLMENT BY MAJOR COURSES AND STUDENT CLASSIFICATION

Second Semester 1963-1964

Major Course	Freshman (Semester)		Sophomore (Semester)		Junior (Semester)		Senior (Semester)		Total
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	
Agriculture	6	0	0	0	0	0	0	0	6
Agricultural Economics	4	8	2	2	1	3	4	4	28
Agricultural Education	8	19	5	6	9	8	13	5	73
Agricultural Engineering	7	3	2	5	2	2	4	7	32
Agonomy	4	4	3	2	3	8	4	6	34
Animal Science	10	10	3	6	3	4	2	4	42
Biology	10	10	5	9	3	7	14	7	65
Dairy Science	4	4	1	5	1	6	4	4	29
Entomology	1	0	0	0	1	0	0	1	3
Food Technology	1	3	0	2	0	0	1	0	7
Forestry	19	17	5	15	4	7	13	16	96
Horticulture	6	9	6	7	4	8	5	10	55
Poultry Science	1	3	0	1	0	1	1	1	8
Pre-Veterinary	20	10	2	15	2	1	1	0	51
Sub-Total	101	100	34	75	33	55	66	65	529
Architecture	35	50	16	30	8	23	25*	24**	211
Building Construction	14	6	2	4	4	3	2	0	35
Sub-Total	49	56	18	34	12	26	27	24	246
Applied Mathematics	13	18	2	17	3	6	8	4	71
Arts and Sciences	124	164	52	88	41	57	43	57	626
Chemistry	4	17	2	9	3	2	8	8	53
Education	0	0	0	0	0	1	1	1	3
Medical Technology	0	0	1	0	0	0	1	0	2
Physics	11	12	3	12	1	4	2	7	52
Pre-Medicine	49	45	14	28	4	16	9	12	177
Sub-Total	201	256	74	154	52	86	72	89	984
Engineering	5	2	0	1	0	0	0	0	8
Ceramic Engineering	2	14	8	12	3	8	9	10	66
Chemical Engineering	27	33	11	29	3	15	13	29	160
Civil Engineering	55	63	22	39	10	36	25	25	275
Electrical Engineering	74	93	40	57	18	52	35	33	402
Industrial Education	3	3	1	3	6	7	4	3	30
Industrial Engineering	16	16	7	10	2	4	7	5	67
Mechanical Engineering	71	68	25	47	15	45	21	32	324
Metallurgical Engineering	1	1	0	3	0	0	0	0	5
Sub-Total	254	293	114	201	57	167	114	137	1337
Industrial Management	74	107	53	66	34	55	69	48	506
Textile Chemistry	5	8	1	7	2	6	12	1	42
Textile Management	29	29	8	24	7	36	27	31	191
Textile Science	5	3	0	5	1	1	3	4	22
Sub-Total	113	147	62	102	44	98	111	84	761
Total	718	852	302	566	198	432	390	389	3857***
					Part-Time		Full-Time		
Graduates					118		134		252
Postgraduates					17		7		24
Classified					18		1		19
Total					153		142		295
Grand Total									4152

includes five who are in the first semester of the fifth year.
 includes seven who are in the second semester of the fifth year.
 includes fifty-six part-time undergraduate students.

ANNUAL RE-WORK PERIOD - TRAVELERS INSURANCE GROUP

The annual re-work period for the Travelers Insurance Group will be March 1-31, 1964. Company representatives will be on campus during this period and will be available to explain the Travelers plans and coverage to any interested employee. Visits will be made to any department desiring such and at times most convenient to the respective departments.

Any present members desiring to make changes to fit their individual needs may do so at this time. Employees presently enrolled and desiring no changes will be automatically continued and need not contact the representatives at this time. Anyone who desires to obtain this type of insurance coverage must make application during their first 31 days of employment, or during this re-work period.

If you wish to make an appointment with one of the representatives, you may do so by contacting Mr. W. J. Stamey, Personnel Division, Extension 365.

PERSONAL MENTION

S. C. Stribling (Ag-ret) has been re-elected secretary-treasurer of the Southern Association of Agricultural Workers.

Arnold E. Schwartz (CE) has been appointed to serve for the next three years on Special Committee 8, "Nuclear Principles and Applications" of the Highway Research Board, National Academy of Sciences.

Billy Ray Skelton (Econ) has completed all requirements for the doctorate. The degree will be awarded in June from Duke University.

Mary C. Griffin (IM) is author of a text (Records Management: A Modern Tool For Business) just released from Allyn and Bacon, Inc.

C. H. Whitehurst, Jr. (IM) delivered an address before the Annual Institute of the S. C. Chapter American Association of Hospital Accountants in Columbia, S. C. on February 20. His subject was "Profits and Non-Profit Institutions."

J. H. Couch (IE) was elected as chairman of the recently chartered Piedmont Chapter of the American Welding Society.

J. A. Chisman (IE) delivered a paper on Operations Research before the Augusta, Georgia Chapter of the American Institute of Industrial Engineers.

W. F. Beckwith (ChE) is the recipient of a duPont \$2,000 summer research stipend. He will work at Clemson.

L. D. Reamer (Forestry) presented at a meeting of the Appalachian Section of the Society of American Foresters on February 7, a paper entitled "The Incidence of Southern Pine Beetle Attack on Stands of Varying Density."

G. C. Robinson (Cer Engr) presented a paper before the Structural Clay Research Foundation at its March meeting in Aurora, Illinois.



C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 3 No. 11

CLEMSON COLLEGE LIBRARY
THE CAROLINA COLLECTION

March 15, 1964

CALENDAR: MARCH 16-APRIL 4

- March 16 M Ralph G. Pearson, Northwestern University, will lecture on "Mechanism of Substitution Reactions in Metal Complexes." 4:00 p.m., Room 118, Brackett Hall.
- March 16-24 Exhibition: U. S. Air Force Art Collection, Lee Gallery
- March 17 T Fellowship Club, 6:30 p.m., Clemson House.
- March 17 T Thomas L. Kesler will lecture on "Modern Trend in Southeastern Industrial Minerals." 7:30 p.m., 103 Geology.
- March 18 W Newcomers Club, 8:00 p.m., Clemson House.
- March 18 W Laicos Club, 8:15 p.m., Clemson House.
- March 19 Th Golf: Clemson v. UNC
- March 20 F Tennis: Clemson v. Maryland
- March 20-22 Egg and Art Exhibition, Food Industries Auditorium.
- March 20 F Ralph R. Coltman, Jr. of the Oak Ridge National Laboratory will lecture on "Radiation Effects in Metals." 4:00 p.m., 101 Physics.
- March 20 F Hans E. Jensen, University of Tennessee, will lecture on "Recent Economic Growth of Alaska: A Study of the Impact of Militarism on the Last Frontier." 3:00 p.m., Olin Auditorium.
- March 21 S Block and Bridle Club barbeque. Noon until 2:00 p.m., Field House, \$1.50 per plate.
- March 23 M Forum Club, 7:00 p.m., Chemistry Building Conference Room.
- March 23 M Baseball: Clemson v. Yale
- March 24 T Baseball: Clemson v. Yale
- March 24 T Golf: Clemson v. Hartford
- March 25 W Tennis: Clemson v. Indiana
- March 25 W Graduate Wives, 8:00 p.m., Clemson House.

CALENDAR (continued)

March 25 W Dr. Myers of Lehigh University will lecture at the Chemistry Seminar, Room 118, Chemistry Building.

March 26 Th Winthrop Daughters, 8:00 p.m. Home of Mrs. B. E. G. Pritchard, 103 Folger Street.

March 26 Th Spring holidays begin at 1:00 p.m. for students.

March 27-April 17 Exhibition by the Guild of S. C. Artists, Lee Gallery.

March 27 F Baseball: Clemson v. Virginia

March 27-April 17 Exhibition: "The Architecture of Steel." Use of steel in 25 American homes, schools, office buildings, and sport facilities. Work by Ballard, Todd & Snibbe, Howard Barnstone & Partners, Pierre Koenig and Mies van der Rohe. Lee Gallery.

March 28 S Baseball: Clemson v. Virginia

March 30 M Baseball: Clemson v. Maryland

March 31 T Baseball: Clemson v. Maryland

April 1 W Tennis: Clemson v. Harvard

April 1 W Classes resume.

April 1 W Baseball: Clemson v. Cornell

April 2 Th Woman's Club, 3:30 p.m., Clemson House.

April 2 Th Tennis: Clemson v. Harvard

April 2 Th Masonic Lodge, 7:30 p.m.

April 3 F Tennis: Clemson v. N. C. State

April 4 S Golf: Clemson v. Duke

April 4 S Baseball: Clemson v. VMI

FULBRIGHT GRANTS FOR 1965

U. S. government grants for teaching and research in Australia, New Zealand, and Latin America for the academic year March-November 1965 will be announced in March and early April. Information will be available in the Graduate School office. Applications should be filed by May 15.

NOTE ON THE HONORS PROGRAM:

Honors courses were first offered at Clemson College during the spring semester of 1962. From February, 1962, to February, 1964, 120 students have been enrolled in one or more honors courses. Of these, 49 have qualified for the Junior Division Honors Program Certificate which will be awarded for the first time this spring.

During the current semester there are 63 students enrolled in honors courses, distributed as follows: 38 freshmen, 11 sophomores, 6 juniors, 8 seniors.

This past summer (1963) Stephen C. King, an honors student and a major in applied mathematics, received a grant from the National Science Foundation to attend an institute at the University of Oklahoma for undergraduate research and independent study.

NOTES ON STUDENT LOANS

Faculty and staff may be interested in the following brief statements on student loan funds at the College. Complete details are available from the student aid office, extension 306.

1. National Defense Student Loan Program. Clemson received an additional \$73,709 for this program for the 1963-64 year and will, in all likelihood, receive an augmentation prior to June 30. To date we have granted 134 loans with an average amount of \$575. We have requested \$158,135 from the Federal Government for 1964-65.
2. United Student Aid Funds, Incorporated. This is Clemson's first full year of affiliation with United Student Aid Funds. As of December 31, the total of these loans amounts to \$75,880.50 with 125 students participating.
3. Locally Endowed Loan Funds. Inasmuch as we have had the above two funds available, we have concentrated our local fund effort into collections. During the calendar year 1963 we have collected over \$19,000 in overdue loan accounts.

NOTES ON ACCREDITING

The College has been notified by the Southern Association that our first follow-up report (resulting from our 1962 Self-Study and Visitation program) is satisfactory and the Association commended us on progress made. The Engineers Council for Professional Development has just completed (March 9-10) a full-scale inspection of all college engineering programs, facilities, and faculty. A report from ECPD concerning this visit will arrive soon and is expected to be favorable.

PAINT RESEARCH INSTITUTE GRANT

The Paint Research Institute has notified H. G. Spencer (Chemistry) that the Institute's research grant to Clemson will be renewed. This grant provides for fundamental research and supports a graduate fellow in the Chemistry Department.

DANFORTH TEACHER GRANTS

The Danforth Foundation has notified the College that three Clemson teachers may be nominated for possible selection as Danforth Fellows.

The Danforth Teacher Grants will be offered to approximately fifty men and women teaching at accredited senior colleges and universities in the United States who give promise of becoming college teachers of unusual strength and competence and are prepared to engage upon a twelve-month program of graduate study, including the academic year 1965-66 plus the summer of 1965 or 1966. Those receiving the grants will be chosen on the basis of potential excellence as teachers, outstanding academic ability, personality congenial to the classroom, and integrity and character, including serious inquiry and commitment within the Jewish, Christian, or one of the other great religious faiths.

Those receiving Danforth Teacher Grants are free to enroll for study at an accredited American university of their choice. They are expected to attend a conference focusing on problems in education and teaching (expenses care for) in August 1965.

At the present time the annual stipend is reckoned upon the candidate's base salary (this to be figured on a calendar year basis) which he is receiving at the time of application. He will receive one-half that salary, plus one-sixth for each living dependent listed in his income tax return for the year previous to his year of graduate study, the maximum grant being \$6,000. In addition, the Danforth Teacher is given tuition and official fees at the graduate school of his choice.

The teacher nominated must have the following qualifications:

AGE: From 25 to 40 years, with the date of the 41st birthday not earlier than November 5, 1964.

TRAINING: At least one year of successful graduate study.

EXPERIENCE: Must be in at least the second year of teaching at the time of nomination. At the time of applying, as well as the following academic year, he must have full faculty status and a minimum of half-time classroom teaching within his total load. (Graduate assistantships are not counted in teaching experience.)

All nominations must be in the hands of the Foundation by April 1, 1964. Those interested in this program should see the Dean of the College.

EASTMAN KODAK FELLOWSHIP

Tennessee Eastman Company has announced the award of an Eastman Kodak Fellowship for a graduate student in the Department of Chemical Engineering during the academic year 1964-65. The award of \$2,800 will provide a fellowship of \$1,500 to the student plus tuition and fees normally charged. The remainder will be available to the department to support its graduate program.

PUBLIC LECTURE

Vice-President for Development, Dr. Wright Bryan, will speak at a lecture sponsored by the AAUP on Monday, March 23. 8:00 p.m., Physics Auditorium. The public is cordially invited.

GERTRUDE STEIN ON EDUCATION

The Newsletter is happy to add to the current literature on education the following not-so-current quotation from Gertrude Stein:

"Education is thought about and as it is thought about it is being done. It is being done in the way it is thought about, which is not true of almost anything. Almost anything is not done in the way it is thought about but education is. It is done in the way it is thought about and that is the reason so much of it is done in New England and Switzerland. There is an extra-ordinary amount of it done in New England and Switzerland.

"In New England they have done it--they do do it--they will do it and they do it in every way in which education can be thought about.

"I find education everywhere and in New England it is everywhere, it is thought about everywhere in America everywhere but only in New England is it done as much as it is thought about. And that is saying a very great deal. They do it so much in New England that they even do it more than it is thought about."

FACULTY ADDITIONS

in English: B. N. Skardon of Athens, Georgia will join the faculty in English in September as an instructor. He holds a bachelor's degree from Clemson College and has completed residence work for his doctorate at the University of Georgia. His teaching experience includes high school work, ROTC instruction, and one year as graduate assistant. He was on the Clemson ROTC staff during the years 1959-61.

Mr. Skardon is married to the former Sara Golden of Columbus, Georgia, and they have four children.

in Chemistry: Joe Frank Allen of Oak Ridge, Tennessee will join the Department of Chemistry and Geology in September as assistant professor of chemistry. His A.B. degree is from Berry College; his M.S. from the University of Mississippi; and his Ph.D. from Georgia Tech. His teaching experience includes two years as graduate teaching assistant at Mississippi and four years as instructor at Georgia Tech. For the past two years he has been a research and development chemist with the Oak Ridge National Laboratory.

Dr. Allen is married to the former Doris Tarvin of Rocky Face, Georgia. They have two children, ages 7 and 4.

FACULTY ADDITIONS (continued)

in Psychology: John Douglas Davenport of Greenville, S. C. will join the Department of Social Sciences in September as an assistant professor of psychology. He is a B.S. graduate of Clemson (1943), holds the M.A. from Furman and has done additional graduate study at the University of Maryland and Harvard University. His teaching experience includes five years in the public schools and one year in college.

Mr. Davenport is married to the former Sarah Aiton of Greenville and they have three children, ages 15, 10, and 3.

in Mathematics: William R. Hare, Jr. of Murfreesboro, Arkansas and Durham, N. C. will join the faculty in September as an associate professor of mathematics. He holds a B.S. from Henderson State Teachers College, and has his M.S. and Ph.D. degrees from the University of Florida. His teaching experience includes two years as a graduate assistant at Florida and three years at Duke University where he is currently an assistant professor. He is a member of Phi Beta Kappa, Phi Kappa Phi, AMS, MAA, and the American Association for the Advancement of Science.

Dr. Hare is married to the former Kathleen Caddy of Long Beach, California, and they have one child.

PERSONAL MENTION

H. M. Jamison (Ext) has been granted an extension of his leave to do graduate study at the University of Tennessee.

Carl B. Bishop (Chem) has been granted academic tenure, effective March 1.

David R. Gentry (Text Res) has been granted tenure, effective February 1.

Virginia S. Hardie (Counselling) was one of four South Carolinians certified in March by the Board of Examiners of the South Carolina Psychological Association.

James F. Miles (Agric Econ) has an article entitled, "Price and End Product Counts" published in the February Broiler Industry Journal.

John F. Pearce (Econ) will be on graduate study leave during the forthcoming academic year. He will do doctoral work at the University of Alabama.

T. H. Eleazer and D. E. Roebuck (L-P Lab) will read papers at the Southern Conference of Avian Diseases at Auburn University, April 1-4.

Gene Park (Math) has been promoted to Captain in the U. S. Naval Reserve.

R. J. Calhoun (English) has been awarded a fellowship for a year's post-doctoral research at Duke University. The Fellowship program is sponsored by the Cooperative Program in the Humanities and supported by the Ford Foundation. Dr. Calhoun has two books underway (on Robert Lowell and Randall Jarrell).

C. H. Farnsworth (Econ) has received a grant to the Ford Foundation Summer Regional Faculty Research Seminar at Duke University for the summer of 1964.

COURSE PREFERENCES OF NEW STUDENTS ON FILE FOR ENTRANCE IN JUNE AND SEPTEMBER 1964 AS
COMPARED WITH 1963 APPLICANTS ON FILE AS OF MARCH 1, 1963.

<u>MAJOR COURSE</u>	<u>1963 TOTAL</u>		<u>1964 TOTAL</u>		<u>NUMBER OF BOYS, 1964</u>	<u>NUMBER OF GIRLS, 1964</u>
Agriculture	61		43		43	0
Agricultural Economics	1		7		7	0
Agricultural Engineering	21		13		13	0
Agricultural Education	3		7		7	0
Agronomy	5		3		3	0
Animal Science	10		14		14	0
Biology	12		57		46	11
Dairy Science	9		3		3	0
Entomology	3		3		3	0
Food Technology	0		1		1	0
Forestry	60		84		84	0
Horticulture	10		7		4	3
Poultry Science	2		1		1	0
Pre-Veterinary	<u>52</u>		<u>46</u>		<u>41</u>	<u>5</u>
	249	12.8%	289	11.1%	270	19
Architecture	265		349		340	9
Building Construction	<u>2</u>		<u>13</u>		<u>13</u>	<u>0</u>
	267	13.7%	362	13.9%	353	9
Applied Mathematics	48		115		91	24
Arts & Sciences	150		299		234	65
Chemistry	60		78		68	10
Physics	21		51		49	2
Pre-Medicine	<u>115</u>		<u>161</u>		<u>147</u>	<u>14</u>
	394	20.3%	704	26.9%	589	115
Engineering	273		355		354	1
Ceramic Engineering	25		13		13	0
Chemical Engineering	73		97		96	1
Civil Engineering	121		132		131	1
Electrical Engineering	164		197		197	0
Industrial Education	2		6		6	0
Industrial Engineering	25		24		24	0
Mechanical Engineering	122		164		164	0
Metallurgical Engineering	<u>2</u>		<u>1</u>		<u>1</u>	<u>0</u>
	807	41.6%	989	37.8%	986	3
Industrial Management	155		197		194	3
Textiles	23		19		19	0
Textile Chemistry	13		9		9	0
Textile Management	31		27		26	1
Textile Science	<u>3</u>		<u>17</u>		<u>17</u>	<u>0</u>
	225	11.6%	269	10.3%	265	4
Total Expressing Major Course Choice	1942		2613		2463	150
Undecided	134		117		110	7
GRAND TOTAL	2076		2730		2573	157





C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 3 No. 12

CLEMSON COLLEGE LIBRARY
SOUTH CAROLINA COLLECTION

April 1, 1964

CALENDAR: APRIL 2-18

- April 2-17 Exhibition by the Guild of South Carolina Artists, Lee Gallery.
- April 2-17 Exhibition: "The Architecture of Steel." Use of steel in 25 American homes, schools, office buildings, and sport facilities. Work by Ballard, Todd & Snibbe, Howard Barnstone & Partners, Pierre Koenig and Mies van der Rohe. Lee Gallery.
- April 2 Th Woman's Club, 3:30 p.m., Clemson House.
- April 2 Th Tennis: Clemson v. Harvard
- April 3 F Tennis: Clemson v. N. C. State
- April 4 S Golf: Clemson v. Duke
- April 4 S Baseball: Clemson v. VMI
- April 6 M John Ciardi, contemporary American poet, will speak in the Chemistry Auditorium, 8:00 p.m.
- April 6 M Baseball: Clemson v. VMI
- April 7 T John C. Phillips, national Sigma Xi lecturer, will speak on "Strength and Weakness of Brittle Materials." 7:30 p.m., Earle Hall.
- April 7 T Sage Club, 6:30 p.m., Clemson House.
- April 8 W Sir Charles Tennyson, grandson of Lord Alfred Tennyson, will speak at 8:00 p.m., Chemistry Auditorium.
- April 8 W Graduate wives, 8:00 p.m., Clemson House.
- April 10 F Tennis: Clemson v. Citadel
- April 11 S Baseball: Clemson v. Georgia
- April 11 S CDA Spring Dance, College Dining Hall.
- April 13 M Forum Club, 7:00 p.m., Chemistry Building Conference Room.

CALENDAR (continued)

April 14 T Baseball: Clemson v. Georgia Tech

April 14 T W. Gladden Smoke, Army Engineer, Research and Development Lab., will speak on "Fuel Cells," at 7:00 p.m., Room 100, Earle Hall.

April 15 W Laicos, 8:15 p.m., Clemson House.

April 15 W Newcomers, 8:00 p.m., Clemson House.

April 16 Th John E. Fitts, President, Colonial-Hites Company, will speak on "The Opportunity Is Still There for the Small Business Man," at 2:00 p.m., Sirrine Auditorium.

April 16 Th Winthrop Daughters will meet at the home of Mrs. B. E. G. Pritchard, 103 Folger Street, 8:00 p.m. Assisting hostesses will be Mrs. Bruce Cloaninger and Miss Virginia Shanklin.

April 17 F Dr. C. G. Overberger, Brooklyn Polytechnic, will speak at 4:00 p.m., Room 118, Chemistry Building.

April 17 F Tennis: Clemson v. Virginia

April 18 S Tennis: Clemson v. Wake Forest

April 18 S Track: Clemson-Duke-Wake Forest

INFORMATION ON VOTER REGISTRATION

On Friday, April 3 from 10:00 a.m. to 5:30 p.m. at the Clemson YMCA, registration books will be available for residents of the Stone Church precinct of Oconee County to register for the 1964 elections.

You may register at your county courthouse (Walhalla in Oconee, and Pickens in Pickens County) on the first Monday and the two succeeding days of each month, and during the first fifteen days of May and August. The books are closed for thirty days before any election and between the first and second primaries.

Qualifications for voting in South Carolina (aside from registration) under current state law are:

1. Residence requirement---one year in the state, six months in the county, and 3 months in the precinct except that for ministers and teachers and their spouses, the state residence requirement is only six months.
2. Ability to read and write a portion of the state constitution, or evidence of payment of tax on property with an assessed value of \$300 or more.

AGRICULTURAL ENGINEER EMPLOYED

Clarence E. Hood, Jr. of Raleigh, N. C. will join the faculty of agriculture in June as an assistant agricultural engineer. He holds the B. S. degree from N. C. State where he has also completed residence for the doctorate.

Mr. Hood is married to the former Gaye Taylor of Calhoun City, Mississippi.

SUMMER RENTALS

Faculty and staff members interested in subleasing their furnished homes or apartments during the summer sessions may list them with the Housing Office prior to May 10. Phone - ext. 343 or 347.

"CHANGING THE NAME"

The change of name--Clemson College to Clemson University--will be official as of July 1. Meanwhile, the administration is compiling a checklist of "things to be done" in connection with the name change. Committees have been appointed by the President to design a new seal; to design a new ring for graduates; and to work out a new letterhead. Suggestions on these or other matters should be made to the Vice President for Development.

NSF GRADUATE TRAINEESHIP IN ENGINEERING

The National Science Foundation has announced that four graduate traineeships in engineering will be awarded to Clemson College for the academic year 1964-65. The awards will carry a stipend of \$2,400 plus tuition and a dependency allowance. Two traineeships will be awarded in civil engineering and one each in mechanical engineering and engineering mechanics. The Foundation expects to continue its assistance in this area with three traineeships during the following year and two traineeships in each of the next two years. The College will receive annually \$2,500 for each traineeship awarded.

MITCHELL RESIGNS AS HEAD OF FOOD TECHNOLOGY

J. H. Mitchell, Jr., head of the Department of Food Technology since 1957, has requested that he be returned to full-time teaching and research by July 1. In agreeing to the request Dean W. H. Wiley expressed appreciation to Dr. Mitchell for his leadership in the development of the department.

Dr. Mitchell will be replaced as department head by Dr. Woodie Prentiss Williams of Minneapolis, Minnesota. He has bachelors and masters degrees from Mississippi State University and a Ph.D. from Texas A&M University, with a major in nutrition. He has worked as director of research and development for Miller and Bushong, Inc., and as director of poultry nutrition and research for the Pillsbury Company.

As a doctoral student Dr. Williams was a teaching assistant and held a Ralston Purina Fellowship. He is a member of Sigma Xi, Omicron Delta Kappa, and Alpha Tau Alpha.

Dr. Williams, who is married and has three children, will assume his duties here May 1.

CLEMSON UNIVERSITY LIBRARY

RESEARCH GRANTS

Sponsored research grants awarded to faculty members since the last issue of the Newsletter include:

From NSF, \$9,000 to Arnold E. Schwartz (CE) for research entitled "Failure of Rock."

From Southern Forest Disease and Insect Research Council, \$700 to Wesley Witcher (Bot) and \$2,469 to R. C. Fox (Ento) for research on "Fomes Annosus Root Rot" and "The Parasites of the Nantucket Pine Tip Moth."

From Southern Railway Systems, \$22,000 to the Department of Animal Sciences and \$21,500 to Agricultural Economics for research dealing with the livestock industry.

From Frito-Lay Corporation, \$1,440 to Horticulture for research involving potato chip quality.

From Union Carbide Chemical Company, \$1,500 to Entomology for research on the control of cotton insects.

From California Chemical Company, \$1,000 to Botany for research concerning the control of tomato and cucumber diseases.

PLANT FOOD SOCIETY HONORS THE LATE G. H. COLLINGS

The South Carolina Plant Food Educational Society has designated its agronomy scholarship as "The Gilbert H. Collings Scholarship." Awarded annually to a Clemson undergraduate, this scholarship has been effective since March, 1962.

CONCERT BAND TOUR: APRIL 14-21

The fifty-five piece Clemson Concert Band, directed by John H. Butler, will begin a one-week Spring Tour on April 14. The concert schedule is:

April 14	Winnsboro
April 15	Newberry, Abbeville, Greenwood
April 16	Thomson, Graniteville, Bamberg
April 17	Hampton, Beaufort, Parris Island
April 21	Clemson

Concert selection will include Von Suppe's popular "Pique Dame Overture," Bach's "Jesu, Joy of Man's Desiring," Beethoven's "Egmont Overture," Cesar Franck's moving "Piece Heroique," the new "Fantasia for Band" by the contemporary American composer Vittorio Giannini, and Gustav Holst's "First Suite for Military Band."

The program will also include lighter music from the movie "Lawrence of Arabia," the Broadway play "Fiorello!" and marches (Commando March, Bravura, Inglesina, Noble Men, Sea Songs). Program novelties include "Take Five," a fine example of 'cool jazz for the concert band, and two Leroy Anderson selections, "Home Stretch"--a racing gallop; "The Typewriter"--a work for typewriter and band.

Graduate School Enrollments by Semesters

	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64
<u>Agriculture</u>							
Agricultural Economics	17	20	16	12	12	6	7
Agricultural Education	15	29	15	15	9	5	3
Agronomy	4	6	4	7	8	4	10
Animal Husbandry	3	7	5	6	5	1	2
Bacteriology							
Dairy	2	3	4	4	2	1	4
Entomology	10	9	16	9	8	3	4
Horticulture	2	2	4	3	10	9	13
Plant Pathology	5	5	5	2	9	8	10
Poultry							
Zoology	4	5			10	7	6
Total Agriculture	62	86	69	63	65	59	68
<u>Arts & Sciences</u>							
Chemistry	17	18	16	15	22	21	32
Economics							
Education	5	15	17	19	12	18	8
English							
Mathematics	5	6	5	8	5	7	11
Physics			11	13	12	3	12
Nuclear Science							
Total Arts & Sciences	27	39	49	46	52	61	63
<u>Engineering</u>							
Agricultural Engineering	9	9	8	6	8	6	6
Ceramic Engineering	2	1	3	3		4	7
Chemical Engineering							
Civil Engineering			1	1		1	10
Electrical Engineering	5	6	4	6	4	3	5
Industrial Education							
Mechanical Engineering	5	5	4	6	6	7	3
Water Resources Engineering							
Materials Engineering							
Total Engineering	21	21	20	22	21	20	52
<u>Ind. Mgt. & Text. Science</u>							
Textile Chemistry	2	3	4	2	4	5	4
Industrial Management							
Total IM & TS	3	3	4	2	4	5	4
<u>Literature</u>							
Unclassified	2	3	7	12	4	4	1
TOTAL ENROLLMENTS	115	152	149	145	146	143	258

CURRICULUM DEVELOPMENTS

The college Curriculum Committee and Educational Council has:

1. approved a two-year pre-pharmacy curriculum, to be administered by the School of Arts and Sciences with Dean Hunter as advisor to students.

2. approved a program leading to the Ph.D. in engineering mechanics, effective in September, 1964.

3. approved the proposal by IM-TS and A & S that textile chemistry be available as a major in the chemistry Ph.D. program.

4. approved a program of study leading to the B.S. degree in science teaching (for secondary school teachers).

5. approved the following new graduate courses:

----Ag Ec 502	Economics of Agricultural Production	3 cr.(3,0)
----Ag E 506	Instrumentation in Agricultural Research	3 cr(2,3)
----CE 532	Advanced Soil Mechanics	4 cr(3,3)
----CE 533	Physical and Physio-chemical Properties of Soils	4 cr(3,3)
----CE 546	Pollution of the Aquatic Envir.	3 cr(2,3)
----CE 547	Selected Topics in Water Resources Engineering	3 cr(3,0)
----Ch 526	Chemistry of Enzymes	3 cr(3,0)
----Econ 511	Seminar in Labor Economics	3 cr(3,0)
----In.Ed. 520	Recent Process Developments	3 cr(3,0)
----EM 523	Dimensional Analysis and Dynamic Similiarity	3 cr(3,0)
----EM 527	Topics in Analytical Mechanics	3 cr(3,0)
----EM 529	Energy Methods and Variational Principles	3 cr(3,0)
----EM 534	Theory of Elastic Stability	3 cr(3,0)
----EM 545	Intermediate Dynamics	3 cr(3,0)
----EM 552	Theory of Ideal Fluid Flow	3 cr(2,0)
----EM 553	Theory of Viscous Fluid Flow	3 cr(3,0)
----EM 556	Flow in Open Channels	3 cr(3,0)
----EM 589, 590	Seminar	1 cr(1,0)
----Math 510	Topology	3 cr(3,0)
----Math 511	Real Variables	3 cr(3,0)

CURRICULUM DEVELOPMENTS (continued)

----Math 512	Functional Analysis	3 cr(3,0)
----Math 513	Stochastic Processes	3 cr(3,0)
----Math 514	Mathematical Statistics	3 cr(3,0)
----Phys 504T	Astronomy for High School Teachers	3 cr(3,0)
----Hist 507	United States Diplomatic History Since 1877	3 cr(3,0)
----Hist 508	International Relations Since 1914	3 cr(3,0)
----Hist 511	Historiography and Seminar in United States History to 1850	3 cr(3,0)
----Hist 512	Historiography and Seminar in United States History Since 1850	3 cr(3,0)
----Econ 511	Seminar in Labor Economics	3 cr(3,0)

(6) Approved a new undergraduate course, Geology 403, Invertebrate Paleontology,
3 cr(2,3).

PASSING AND FAILING AS VIEWED BY THE STATE HIGH SCHOOL SUPERVISOR

In the March, 1964, issue of South Carolina Schools, Mr. Henry G. Hollingsworth, high school supervisor, has an article entitled "Our Students Are Prepared For College." The following quotations from the two-page article will be of interest to college teachers:

"It is time that our colleges examine their own practices and face up to the fact that once they accept a student, his success or failure is their responsibility."

"High school principals are alarmed when failure rates in a class approach 10%. The teacher's methods are evaluated and improvements recommended. Under normal conditions, students of average or above intelligence won't fail if properly taught. Whenever the percentage of failures approaches 10%, a thorough study should be made to determine why."

"Since college drop-outs are due chiefly to failure, grading systems also need examination. In some college classes, the failure rate is pre-determined before the professor meets his class. Regardless of whether students have an average IQ of 80 or 160, the same percentage will fail anyway."

PERSONAL MENTION

L. G. Rich (Engr) was one of five administrators constituting a review group on Water Pollution Control Grants and Related Matters which met in Washington on March 23 at the invitation of the Public Health Service (Division of Water Supply and Pollution Control).

Emery Gunnin (Arch) has been accepted by Oklahoma State University for study this summer in a NSF sponsored faculty institute on structural engineering.

C. B. Thompson (Econ) has been awarded an Economics-in-Action fellowship for study at the Case Institute of Technology in Cleveland this summer.

D. F. Cohoon (Bot-Bact) has been granted academic tenure as a member of the faculty of agriculture.

A. J. Fear (English) served as a judge at the Regional Debate Tournament held in Atlanta, March 19-21.

Lewis E. Hill (Econ) has been awarded a fellowship in the University of Chicago summer program "Recent Developments in Applied Economics," during the month of August.

Victor Hurst (Dy Sci) has been invited to serve as discussant at the 5th International Congress of Animal Reproduction, to be held at Trento, Italy in September.

N. R. Bauld and J. P. Uldrick (EM) presented papers at the March 5-6 SE Conference on Theoretical and Applied Mechanics. The conference met in Atlanta.

J. L. Richardson (Textiles) has been re-elected as executive secretary for the Southern Textile Methods and Standards Association.

K. Lehotsky (Forestry) has been appointed a member of the SREB regional committee on forestry education and research.

J. H. Couch (IE) has been awarded the District Meritorious Certificate by the American Welding Society.

J. N. Thurston (EE) will serve as a member of the NSF evaluation panel in Washington, April 1-4.

B. E. Dunkle (IE) has been selected for the National Science Foundation Summer Institute in Principles and Engineering Applications of Probability and Statistics at the University of California (summer, 1964).

A. S. Tombes (Ento) will attend by invitation the 12th International Congress of Entomology, meeting in London in June, 1964.

W. S. Johnson and J. L. Campbell (ME) have been awarded NSF summer teaching fellowships for 1964.



C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 3 No. 13

CLEMSON COLLEGE LIBRARY
SOUTH CAROLINA COLLECTION

April 15, 1964

CALENDAR: APRIL 16-MAY 2

- April 16 Th Pickens County residents may register to vote, L. C. Martin Drug Store, throughout the day.
- April 16 Th Winthrop Daughters meeting, 8:00 p.m. Home of Mrs. B. E. G. Pritchard, 103 Folger Street.
- April 17 F Dr. C. G. Overberger, Brooklyn Polytechnic, will speak at 4:00 p.m., Room 118, Chemistry Building.
- April 17 F Tennis: Clemson v. Virginia
- April 18 S Tennis: Clemson v. Wake Forest
- April 18 S Track: Clemson-Duke-Wake Forest
- April 20 M Tennis: Clemson v. Florida State
- April 21-May 8 Exhibition: South Atlantic Artists. The work of outstanding artists from North and South Carolina, Georgia and Florida. Lee Gallery.
- April 21 T Band Concert by Clemson Band, 8:00 p.m., Tillman Hall.
- April 21 T Fellowship Club, 6:30 p.m., Clemson House.
- April 22 W Graduate wives, 8:00 p.m., Clemson House.
- April 25 S Graduate Record Examination. Registrar's Office.
- April 25 S Track: Clemson v. South Carolina
- April 27 M Forum Club, 7:00 p.m., Chemistry Conference Room.
- April 28 T Golf: Clemson v. Wofford
- April 28 T Dr. Robert R. Rowe, United States Steel Corporation, will talk on "Modern Timber Design and Construction," 7:00 p.m., Civil Engineering Auditorium.
- April 29 W Laicos Club, 8:15 p.m., Clemson House Lounge. Couples' party.

CALENDAR: (continued)

April 30	Th	Dr. William Cecil Herndon, University of Mississippi, will speak at the Chemistry Seminar, 4:00 p.m., Room 118, Chemistry Building.
May 1	F	Baseball: Clemson v. Wake Forest
May 1	F	Symposium on "Air Pollution: A Future Problem in the Southeast?" Earle Hall Auditorium, 10:00 a.m., and throughout the day.
May 2	S	"May Morning Breakfast" sponsored by Clemson Winthrop Alumnae Chapter, 7-10:00 a.m., Saber Room Clemson House. Tickets \$1.00. Public invited.
May 2	S	Baseball: Clemson v. Duke

ADDITION TO CIVIL ENGINEERING FACULTY

John deCourcy Antrim of Jersey City, New Jersey, and College Park, Maryland, will join the faculty of Civil Engineering in September as an assistant professor. His B.S. is from Lehigh University and his Ph.D. from Purdue. His teaching experience includes four years at Purdue and one year at the University of Maryland where he is an assistant professor.

In addition to teaching, Dr. Antrim has had experience as an engineer with The Texas Company (Westville, New Jersey) and Harland Bartholomew and Associates (Memphis, Tenn.). He is a member of Tau Beta Pi and Sigma Xi and is the author of publications dealing with fatigue study of concrete.

Dr. Antrim is married to the former Bea Davis of Greenville, S. C.

RESULTS OF GRADUATE RECORD EXAMINATIONS INSTITUTIONAL TESTING PROGRAM

The Graduate Record Examinations were given on March 17 and 19 to 596 candidates for graduation in June and August 1964 and February 1965. In addition, 63 candidates for graduation who took the examination under the national program are included in the computation. Average scores are shown below, compared with those made in 1963.

APTITUDE TEST

	<u>College</u>	
	<u>1964</u>	<u>1963</u>
Verbal	443.1	417.1
Quantitative	555.6	553.2
Total	998.7	970.3

The average total score (1964) for college seniors who took the test nationally is 962.0.

SEASON TICKET APPLICATION FORMS FOR THE 1964-65 SPORTS SEASON

Season ticket application forms for the 1964-65 sports season have been sent to deans and directors for distribution to faculty and other employees of Clemson. Anyone who has not received an application should contact his dean or director or call the Athletic Ticket Office at extension 276. Priority for faculty and employees expires on June 10. Those leaving Clemson for the summer should be sure to complete applications prior to departing.

ADVANCE DEPOSIT REQUIRED OF NEW STUDENTS

Applications for admission to Clemson are 27 per cent ahead of last year, and 55 per cent ahead of those in 1962. In order to assist the Director of Admissions in determining who are serious applicants and who are not, the Board has authorized charging an advance admissions deposit of all applicants for September admission. This deposit is in addition to the room deposit required of dormitory students.

The policy is:

(1) For applicants accepted for enrollment in the School of Architecture, a deposit of \$50 must be made within two weeks after the notification of acceptance is issued, with the provision that a refund of \$25 will be made if the applicant notifies the Director of Admissions prior to May 1 that he will not enroll.

(2) For out-of-state applicants accepted for enrollment in Schools other than Architecture, a deposit of \$25 must be made within two weeks after the notification of acceptance is issued, with the provision that the deposit will be refunded if the applicant notifies the Director of Admissions prior to May 1 that he will not enroll.

(3) For South Carolina applicants accepted for enrollment in Schools other than Architecture, a deposit of \$25 must be made by June 1 or within two weeks after the notification of acceptance is issued, whichever is later, with the provision that any deposits made in advance of June 1 will be refunded if the applicant notifies the Director of Admissions prior to June 1 that he will not enroll.

(4) For all applicants whose notification of acceptance is issued within the two weeks just prior to matriculation day, the deposit must be made immediately upon acceptance.

(5) For all applicants who enroll, the admission deposit will be refunded to the student at the time of matriculation.

(6) For all applicants whose provisional acceptance is not confirmed, the deposit will be refunded as soon as feasible after it is determined that the provisional acceptance is not to be confirmed.

RESEARCH AND GRADUATE STUDY GRANTS

The following grants have been awarded since the last edition of the Newsletter was printed:

From NIH, \$6,084 to N. P. Marullo (Chem) for "Stereospecific Synthesis of Amines" (renewal of existing project).

From USDA, \$3,338 to D. R. Gentry (IM-TS) for a study of combing of roller gin flight bar speed, pressure, and resulting temperatures on fiber properties and spinning performance.

From the Volunteer Cement Division of the Ideal Cement Company of Knoxville, Tenn., \$1,500 to Ceramic Engineering for a graduate fellowship.

McCONNELL SEMINAR HOUSE AVAILABLE

The President of Davidson College has informed Clemson that the Robert Earle McConnell Foundation again this summer is offering the use of the Seminar House at High Hampton to educational institutions for faculty study groups, committee meetings, seminars, and other official purposes. The 1964 season is from mid-May to mid-October. High Hampton (Cashiers, N. C.) is about an hour's drive from Clemson.

The House has two twin bedrooms, two double bedrooms, a large living and study area, kitchen, and two small porches. With a total of six (twin-size) beds and two (double) beds, it can accommodate 8-10 guests by using the porches for sleeping and 6-8 guests without using the porches.

The Foundation provides maid service, utilities, and meals which, except for breakfast at the Seminar House, are taken at High Hampton Inn, a short drive from the House.

Wives and husbands of participating members wishing to accompany their spouses will be expected to pay for their luncheon and dinner at the Inn. Luncheon is \$2.25 except on Sunday when it is \$2.75. The evening meal is \$2.75 except on Wednesday and Saturday nights when they have roast beef and steak at \$3.75. No charge will be made for non-participating wives or husbands staying at the Seminar House if the group is sufficiently small to permit this.

In addition to beautiful scenery, there are two excellent golf courses nearby (Highlands and Sapphire) plus the High Hampton course. There are also tennis, swimming, and fishing facilities.

Reservations for Seminar House will be made in order of their receipt and no reservation will be accepted for a period longer than one week or for more than one week-end (Friday-Saturday-Sunday). In requesting reservations, please indicate the size and general purpose of your group together with alternate dates for your use of the House. All reservation requests should be made by way of the office of Dean of the College.

CHANGES IN THE NAMES OF UNITS

Effective July 1, when Clemson College officially becomes Clemson University, the School of Agriculture will become the College of Agriculture and Biological Sciences; the School of Arts and Sciences will become the College of Arts and Sciences; the School of Engineering will become the College of Engineering. The Department of Food Technology and Human Nutrition will become the Department of Food Science and Biochemistry; and the Department of Textile Chemistry, Weaving and Designing, Yarn Manufacturing, Textile Research and Textile Management will be combined into a single Department of Textiles.

AG SCHOOL WILL BE HOST TO JUDGING CONTEST

The School of Agriculture will be host to the SE Live Animal Evaluation and Livestock Judging Contest on April 23-25. The schedule of events includes an evaluation contest (April 23, 1:30-3:30 p.m., at the steer barn); a judging contest (April 24, 7:30 a.m.-noon, at the steer barn); and an awards breakfast April 25, 7:30 a.m., Clemson House.

MINUTES: THE FACULTY SENATE OF CLEMSON COLLEGE

The ninety-fifth meeting of the Faculty Senate of Clemson College was held on Tuesday, March 10, 1964, in the auditorium of Olin Hall, with President Dinwiddie presiding.

There being no unfinished business, President Dinwiddie called for the reports of the committees.

Professor W. G. Hudson, chairman of the Welfare Committee, reported the following items:

1. The committee had investigated the possible income tax advantages in a deferred compensation plan for the faculty and staff. Professor Cecil C. Davis submitted a report of the results of such investigation, and recommended that no action be taken at this time.
2. The committee had studied the question of changing the College calendar to allow termination of the first semester prior to the Christmas holidays. Professor Hudson reported the members strongly favored such a change, provided the mechanics of the change can be arranged with a view toward reconciling some possible problems. It was moved and seconded that this statement be endorsed by the Senate. The motion was passed.
3. The committee had also studied the subject of extending educational T.V. to Clemson's classrooms. The committee concluded that there are such varying views on the subject, that it might be wise for a group composed of representatives from technically and non-technically oriented faculty and academically and financially oriented administration to take a longer and harder look at educational television than has now been possible by this committee.

MINUTES: THE FACULTY SENATE OF CLEMSON COLLEGE (continued)

4. The committee would like to request the Administration to look into the possibility of having a single authority responsible for the synchronization of the various bells, clocks, and whistles with standard time, say once a week or once a month, in an attempt to eliminate greater than two minutes discrepancies. The Senate endorsed this suggestion.
5. Professor Hudson reported that Dr. Hair wants compulsory faculty participation in the T.B. skin test. After discussion, it was moved that the Faculty Senate strongly endorse this program, but not recommend that it be compulsory, and that it be administered as the Administration deems proper. The motion carried.

Professor T. A. Campbell, chairman of the Admissions and Scholarship Committee reported for the committee and submitted the following recommendation in the form of a motion which carried.

"That the Faculty Senate go on record as endorsing President Edwards' recently expressed views on secondary education as reported in the daily newspapers."

Professor Campbell called for a vote on the recommendation made at the March meeting concerning restriction on tests prior to exams. After discussion, the recommendation was voted on and defeated on the basis that such a restriction would be an infringement of the teacher's freedom of choice of teaching methods.

Professor Campbell further submitted the following recommendations in the form of motions:

1. That the recommendation made at the March meeting concerning non-academic absentees be withdrawn. Professor Campbell reported that Dean Cox had met with the committee and had brought out that this recommendation involves a mechanical solution to a problem demanding a policy revision. The committee further recommended that the Faculty Senate should review the absence policy and recommend fundamental policy changes, and that this problem be turned over to the Policy Committee. The motion carried.
2. That the Faculty Senate ask the Administration to delete the grade of "E" from the grading system of the College. The motion carried.

Professor W. B. Barlage, chairman of the Policy Committee reported for the committee. He turned the floor over to Professor Victor Hurst who submitted a list of the pros and cons regarding Academic Faculty-Research Faculty merger. Professor Barlage then submitted a second draft of the proposed changes of the Constitution and By-laws of the Faculty and Faculty Senate, conforming to the suggestions made by the Senate. He pointed out the changes and moved that this proposed Constitution and By-laws be adopted. After some discussion, and in compliance with the present Constitution, it was moved that this motion be held over until the next meeting.

There being no further business, the meeting adjourned.

Susan Brown, Secretary

COURSE PREFERENCE: NEW STUDENT APPLICATION ON FILE APRIL 1, 1964 COMPARED WITH APRIL 1, 1963

<u>MAJOR COURSE</u>	<u>1963 TOTAL</u>		<u>1964 TOTAL</u>		<u>NUMBER OF BOYS, 1964</u>	<u>NUMBER OF GIRLS, 1964</u>
Agriculture	57		43		43	0
Agricultural Economics	1		8		8	0
Agricultural Engineering	22		12		12	0
Agricultural Education	1		10		10	0
Agronomy	4		3		3	0
Animal Science	10		13		13	0
Biology	13		53		41	12
Dairy Science	7		3		3	0
Entomology	3		2		2	0
Food Technology	0		1		1	0
Forestry	61		83		83	0
Horticulture	8		9		6	3
Poultry Science	2		1		1	0
Pre-Veterinary	53		46		42	4
	<u>242</u>	12.2%	<u>287</u>	10.9%	<u>256</u>	<u>19</u>
Architecture	218		310		301	9
Building Construction	4		11		11	0
	<u>222</u>	11.2%	<u>321</u>	12.1%	<u>312</u>	<u>9</u>
Applied Mathematics	49		116		94	22
Arts & Sciences	196		324		253	71
Chemistry	62		80		69	11
Physics	23		47		45	2
Pre-Medicine	119		165		151	14
	<u>449</u>	22.7%	<u>732</u>	27.7%	<u>612</u>	<u>120</u>
Engineering	273		352		351	1
Ceramic Engineering	23		19		19	0
Chemical Engineering	73		100		99	1
Civil Engineering	132		141		140	1
Electrical Engineering	167		204		203	1
Industrial Education	2		7		7	0
Industrial Engineering	23		29		29	0
Mechanical Engineering	134		174		174	0
Metallurgical Engineering	2		1		1	0
	<u>829</u>	41.9%	<u>1027</u>	38.9%	<u>1023</u>	<u>4</u>
Industrial Management	165		205		203	2
Textiles	26		20		20	0
Textile Chemistry	14		8		8	0
Textile Management	29		26		26	0
Textile Science	3		17		17	0
	<u>237</u>	12.0%	<u>276</u>	10.4%	<u>274</u>	<u>2</u>
Total Expressing Major Course Choice	1979		2643		2489	154
Undecided	117		123		117	6
GRAND TOTAL	2096		2766 *		2606	160

B. S. PROGRAM IN SCIENCE TEACHING

The April 1 issue of the Newsletter noted the approval of a program leading to the B. S. in Science Teaching (for prospective secondary school teachers). The curriculum for the program is:

<u>Freshman</u>				<u>Sophomore</u>			
Math 105	4	Math 106	4	**Math 205	4	**Math 206	
Engl 101	3	Engl 102	3	Engl 203	3	Engl 204	
Chem 101	4	Chem 102	4	/Phys 201	3	/Phys 202	
Hist 101	3	Hist 102	3	/Phys 203	1	/Phys 204	
MS or AS	<u>1</u>	MS or AS	<u>1</u>	Bot 101	4	Zoo 101	
	15		15	MS or AS	<u>1</u>	Zoo 103	
					16	Major	
						MS or AS	
<u>Junior</u>				<u>Senior</u>			
Educ 201	3	Educ 302	3	Educ 335	3	*Educ 412	
Hist 203	3	Hist 204	3	Arch 403	3	Educ 424	
Major	6	Major	9	Major	6	Educ 458	
/Science		/Science		Elective	3	Music 310	
Elective	3	Elective	<u>3</u>	Gov 301	<u>3</u>		
Econ 201	<u>3</u>		18		18		
	18						

134 hours for graduation

* Block Schedule of courses to be taken as shown.

/ Students who are to major in Physics (or who wish to take science electives in the field of Physics) will replace these courses with Phys 211, 212, 213, and 214.

** Students who are to major in Biology should schedule 8 credits of additional chemistry instead of Math 205 and 206. This chemistry must include either Chem 220 or Chem 327 and 327. The other 4 credits should be selected from the following courses: Chem 316, Chem 324 and 328.

The Science Electives are to come from the fields of Astronomy, Biology, Chemistry, Geology, Mathematics, or Physics and will not be from the same field as the major.

PERSONAL MENTION

Walton H. Owens and Rameth R. Owens (History) have been granted extensions of their leave to continue doctoral study at Florida State University.

J. W. Huffman (Chem) and T. M. Ellison (Chem-grad) presented papers at the April 5-10 Philadelphia meeting of the American Chemical Society.

Virginia Hardie (Student Affairs) chaired a panel on vocational consulting at the April 3 Gatlinburg, Tennessee meeting of the SE Psychological Association.

Sarah Hardy (Math) has resigned to devote full-time to graduate study.

Eugene Park (Math) has been accepted for study this summer in the National Science Foundation Summer Institute in Principles and Engineering Applications of Probability and Statistics at the University of California, Los Angeles.

Max Boling (Ext) has completed all requirements for his Ph.D. at Mississippi State University and has been named Extension Agronomist-Conservation.

W. L. Ball (EE) will participate in the National Science Foundation Advanced Seminar on Use of Computers in Engineering Education to be held at the University of Houston, June 8 to July 31.

L. H. Senn (Ento) has been re-elected Chairman of the Southern Plant Board at its recent meeting in Mobile, Alabama.

J. P. Uldrick (EM) attended this month a NSF Shock and Vibration Symposium held at Duke University.

W. D. Trevillian (IM-TS) read a paper at the April 13-15 meeting of Synthetic Yarn Manufacturers in Atlantic City, N. J.

T. D. Efland (IM-TS) is to be on the program of the Knitting Symposium, April 16 in Belmont, N. C.

J. Acorn, R. Hunter, I Regnier (Arch) are now having a three-man show, paintings and sculptures, in the Asheville Art Museum, Asheville, N. C. through April 26, 1964

W. C. Michelberry (Food Sci) will present a paper at the Carolina Vendors Association meeting in Asheville, May 23.

PHI KAPPA PHI BANQUET

The Phi Kappa Phi banquet will be held at the Clemson House on Thursday, April 30, 7:00 p.m.

STATE RETIREMENT ROLLS RE-OPENED FOR PRIOR SERVICE

In its current session, the General Assembly has made two significant changes in State law affecting the retirement of State employees, teachers in public schools, and other members employed by counties or municipalities participating in the South Carolina Retirement System.

First, a change in the benefit formula for retirement allowances, effective July 1, 1964, was announced in a recent Newsletter, and information has been issued through their departments to all regular Clemson employees.

A second amendment to State law now makes it possible for active members enrolling on or before December 31, 1964, to register "prior service" for credit without cost if official supporting certificates are delivered on or before that date to the S. C. Retirement System, Box 1495, Columbia. ("Prior service" means service performed for the State or another participating employer before July 1, 1945.)

Additional information will be issued in an announcement through the departments to all employees about May 15, 1964.

WATER RESOURCES RESEARCH INSTITUTE ESTABLISHED

Effective May 1, 1964, a Clemson Water Resources Research Institute will be established. The basic organization of the Institute is shown on the following page of the Newsletter.

The Institute will coordinate all water research efforts, and will unite the Schools of Agriculture, Arts and Sciences, and Engineering in this important activity.

The three Councils will (1) advise the Directorate as to research needs in hydrology, water quality, and water policies; (2) assist in the evaluation of research proposals; (3) conduct interdepartmental seminars on hydrology, water quality, and water policies; and (4) cooperate with interested agencies, organizations and firms throughout the state and region on programs of mutual interest.

The Directorate will (1) implement objectives of the program; (2) review proposals for research support; (3) review progress reports; (4) supervise and coordinate multidisciplinary research programs; and (5) inform and make recommendations to the Institute Policy Board.

The Institute Policy Board will (1) establish general objectives of the program; (2) select members of the Directorate; (3) review activities of the Directorate; and (4) resolve points of disagreement within the Directorate.

WATER RESOURCES RESEARCH INSTITUTE

DEAN
OF THE
COLLEGE

INSTITUTE POLICY BOARD

DEAN OF ENGINEERING
DEAN OF AGRICULTURE
DEAN OF ARTS & SCIENCE

ENGINEERING
RESEARCH

DIRECTORATE *

2 ENGR. REPRESENTATIVES
2 AG. REPRESENTATIVES
1 A.S. REPRESENTATIVE

AGRICULTURAL
RESEARCH

C. C. C. O. H.
(CLEMSON COLLEGE
COUNCIL ON
HYDROLOGY)

C. C. C. O. W. Q.
(CLEMSON COLLEGE
COUNCIL ON
WATER QUALITY)

C. C. C. O. W. P.
(CLEMSON COLLEGE
COUNCIL ON
WATER POLICIES)

DEPARTMENTAL
RESEARCH

DEPARTMENTAL
RESEARCH

* ROTATING CHAIRMANSHIP
BETWEEN ENGR & AG.





C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 3 No. 14

CLEMSON COLLEGE LIBRARY
SOUTH CAROLINA COLLECTION

May 1, 1964

CALENDAR: MAY 1-16

- May 1 F Baseball: Clemson v. Wake Forest
- May 1 F Symposium on "Air Pollution: A Future Problem in the Southeast?"
10:00 a.m., and throughout the day, Earle Hall Auditorium.
- May 2 S "May Morning Breakfast" sponsored by Clemson Winthrop Alumnae
Chapter, 7-10:00 a.m., Saber Room, Clemson House. Tickets \$1.00.
Public invited.
- May 2 S Baseball: Clemson v. Duke
- May 4 M Dr. Leon Mandell (Emory University) will lecture on "Nuclear Magnetic
Resonance and Its Applications." 4:00 p.m., Room 118, Brackett Hall.
- May 5 T Sage Club, 6:30 p.m., Clemson House.
- May 5 T Fellowship Club Ladies Night, 7:00 p.m., Clemson House.
- May 6 W Gamma Sigma Delta Banquet, 7:00 p.m., Clemson House.
- May 6 W Honors and Awards Day, throughout the afternoon.
- May 6 W Honors and Awards Day address by Dean Walter D. Smith (Winthrop
College) on "The Behavioral Sciences and the Control of Behavior."
2:30 p.m., College Auditorium.
- May 6 W Baseball: Clemson v. Furman
- May 6 W Laicos, 8:15 p.m., Clemson House.
- May 6 W Newcomers Club, 8:00 p.m., Clemson House
- May 7-8 SE Regional Conference of Artificial Breeding Cooperatives will meet
in the Clemson House.
- May 7 Th Woman's Club, 3:30 p.m., Clemson House.
- May 8 F Baseball: Clemson v. N. C. State
- May 9 S Baseball: Clemson v. U. N. C.

CALENDAR: (continued)

- May 11 M Forum Club, 7:00 p.m., Chemistry Building Conference Room.
- May 12 T Baseball: Clemson v. U. S. C.
- May 12 T Dr. G. A. Clowes (Chem. Department of Surgery, S. C. Medical College) will lecture on scientific problems in the medical field. 3:00 p.m., Earle Hall.
- May 12 T Faculty Senate meeting, 4:00 p.m., Olin Hall.
- May 12 T Pops Concert: 7:30 p.m., Amphitheater (in case of rain, College Chapel).
- May 13 W Graduate Wives, 8:00 p.m., Clemson House.
- May 13-15 Board of Visitors will be on campus. (See note elsewhere in Newsletter)
- May 14 Th Edwin H. Seim (VP for Manufacturing, G. E. Corporation) will lecture on management in today's business world. 2:00 p.m., Chemistry Auditorium.
- May 15 F Research Faculty meeting, 4:00 p.m., P&AS Auditorium.

HONORS AND AWARDS DAY

Honors and Awards Day will be observed Wednesday, May 6. At this time the students of this institution who have excelled in scholarship and won special awards will be recognized and honored. Parents and friends from all over the state will come to Clemson for the day to be guests of the College.

Classes will be suspended at noon so that students and faculty may attend the school programs at 1:00 p.m., the College Convocation in the Auditorium at 2:30 p.m., and the Army-Air Force Parade on Bowman Field at 4:30 p.m. Faculty members and their wives are cordially invited to be present at each of these events and to attend the President's Reception for all honor students and their parents at the President's Home from 5:30 to 6:30 p.m.

Three unusual and notable events will occur on May 6. At the conclusion of the College Convocation a portrait of former President R. F. Poole, painted by Mr. Charles N. Crowson, will be unveiled. For the first time the Honors Council will award Junior Division Honors Program Certificates to those students who have satisfied the requirements in that program. And the first Major Rudolph Anderson, Jr., Trophy will be presented at ceremonies on Bowman Field. Senator Thurmond is scheduled to be present for this award.

The speaker for the College Convocation will be Dr. Walter D. Smith, Dean of Winthrop College.

Speakers at school programs include W. H. Wiley (Agriculture); A. L. Freeman, J. F. Kortan, and G. C. Means, Jr. (Architecture); M. A. Owings (Arts & Sciences); L. G. Rich (Engineering); and Lyman B. Woodard (IM-TS).

HIGHLIGHTS OF APRIL MEETING OF THE BOARD OF TRUSTEES

The College Board of Trustees met April 15 in Columbia. Actions taken by the Board included the following:

An authorization to increase Clemson House rates, rentals on college-owned residences, and student fees for the dining hall, dormitories and laundry.

Confirmation of the employment of architects for construction projects now in advanced planning stages.

An authorization to take initial steps leading to the construction of a new dormitory for men and one for women.

An amendment to the college retirement policy for regular employees. The new policy states that such an employee may be continued through the end of the fiscal year in which he attains the age of sixty-five years.

An authorization for the College to seek legal ways of donating certain equipment to the Smithsonian Institution.

An authorization whereby the College may grant certain easements, or sell or lease small parcels of land to the town of Clemson, the Oconee County Airport, the Summerville Airport, Mr. T. S. Millford, the Pickens County School District, the Piedmont Presbytery, the Rochester Real Estate Company, and the Monsanto Chemical Company.

Confirmation of college actions (reported in detail in the April 15 Newsletter) concerning (1) the requirement of advance deposits by applicants for admissions; (2) the changes in the name of the Schools of Agriculture, Arts and Sciences, and Engineering; (3) the re-organization of the five textile departments into two; (4) the organization of a college Water Resources Institute; and (5) the change in name of the Department of Food Technology and Human Nutrition to Food Science and Biochemistry.

Approval of the appointment of Dr. Woodie P. Williams as head of the Department of Food Science and Biochemistry, and of Dr. Carl E. Boyd as director of the Department of Livestock and Poultry Health.

Adoption of a resolution in memory of Dr. Richard W. Carter, director of the Department of Livestock and Poultry Health, who died on February 21, 1964.

Confirmation of the report of the Faculty-Trustee Committee's report on the awarding of five honorary degrees at the May Commencement (names of those awarded degrees are confidential until all have been notified and have responded).

Confirmation and acceptance of the reports and recommendations of the public service agencies of the School of Agriculture.

CLEMSON UNIVERSITY LIBRARY

PHILOSOPHY AND RELIGION TEACHER TO JOIN FACULTY

James Hamilton Ware, Jr., of Staunton, Virginia will join the faculty of Social Sciences in September as an assistant professor of philosophy and religion. He has bachelor's and master's degrees from Baylor University, a Bachelor of Divinity degree from the Southern Baptist Theological Seminary, and is a candidate for the Ph.D. at Duke University.

Mr. Ware has taught religion at Bridgewater College and has been a minister at three different Virginia Baptist churches. Currently he is minister of education at the First Baptist Church of Staunton, Virginia. He is married to the former Emma Holmes of Tupelo, Mississippi.

LANGUAGE TEACHER TO JOIN FACULTY

William B. Herlinger of Vienna, Austria, and Cullowhee, N. C., will join the Department of English and Modern Languages in September as an associate professor of modern languages.

Mr. Herlinger's education includes study at the University of Vienna, the Consular Academy of Vienna, and the University of Berlin. He holds the DkFM from the latter institution.

His teaching experience includes five years in secondary schools and 15 years in colleges and universities. He has been a member of the faculty of the University of Cordoba (Argentina), University of Andes (Colombia), University of Venezuela, Universities Vienna, and Western Carolina College. For eleven years he was also Austrian Consul General and Cultural Attache for the Austrian government in Latin American republics.

Mr. Herlinger is married to Fustin Maria Herlinger of Merida, Yucatan, Mexico.

NEW DIRECTOR OF LIVESTOCK-POULTRY HEALTH DEPARTMENT

Carl Ellis Boyd of Esther, Missouri, and Reynoldsburg, Ohio, has been appointed director of the Livestock-Poultry Health Department, replacing Dr. Richard Carter who died of a heart seizure in March.

Dr. Boyd has studied at the University of Idaho, Washington State College, and Auburn University. His D.V.M. is from the latter institution. In addition, he has studied law for a year at the Woodrow Wilson College of Law in Atlanta and has completed a summer institute in executive training at the University of Chicago.

His work experience includes five years on the faculty of Ohio State University and 20 years as a veterinarian with federal agencies. From 1956 to 1959 he was veterinarian-in-charge, Virginia Division; and since 1959 he has been veterinarian-in-charge, Ohio Division.

HORTICULTURIST TO JOIN AGRICULTURE FACULTY

Ray Ralph Rothenberger of Oley, Pennsylvania, and Columbia, Missouri, will join the agricultural faculty in July as an assistant professor. He holds a bachelor's degree from Pennsylvania State University and a master's degree from the University of Missouri where he is a candidate for the doctoral.

Mr. Rothenberger is married to the former Barbara Heins of Carrollton, Missouri, and they have one child.

CLEMSON PRODUCES MASS IMMUNIZATION DOCUMENTARY

A 20-minute, sound, color motion picture entitled "A CHALLENGE MET" and depicting the voluntary mass immunization program conducted for the student body last fall has been produced by the Public Relations Office. The film was made possible by a grant from the Lederle Laboratories of American Cyanamid Company. The immunization and detection program was directed against influenza, polio and tuberculosis.

Photographic supervision was by James P. Burns of the College Photo Lab, assisted by Charles W. Haralson and William D. Cromer. The film was presented at the recent 42nd annual meeting of the American College Health Association in Denver, by Dr. Judson E. Hair, director of student health services.

SEASON TICKET APPLICATION FORMS FOR THE 1964-65 SPORTS SEASON

Season ticket application forms for the 1964-65 sports season have been sent to deans and directors for distribution to faculty and other employees of Clemson. Anyone who has not received an application should contact his dean or director or call the Athletic Ticket Office at extension 276. Priority for faculty and employees expires on June 10. Those leaving Clemson for the summer should be sure to complete applications prior to departing.

BOARD OF VISITORS HERE MAY 13-15

During the spring of each year, the College is host to a group of distinguished South Carolina citizens who are appointed by the Board of Trustees as a "Board of Visitors." The visitors remain on the campus for two days, during which they visit college buildings and laboratories, meet members of the faculty and staff, and prepare a report containing their observations and suggestions. Membership of this year's Board, which will be on campus from noon, May 13 until noon, May 15, is E. H. Seim (Vice-President, G. E.), Hampton; G. F. Bowers, Jr. (State Senator), Estill; H. W. Musk, Jr. (Vice-President, S. C. National Bank), Charleston; Norman LeBlanc (Mgr., Shuron-Continental), Barnwell; T. W. Smith (W. Smith Farms), Williston; F. E. Timmerman (State Senator), Edgefield; Henry Blohn (Dir., Parke-Davis & Co.), Greenwood; A. A. Watters, Jr. (N. Y. Life Ins. Co.), Spartanburg; R. L. Stoddard (Mayor), Spartanburg; J. C. Rivers (farmer & businessman), Chesterfield; W. H. Grier (President, Rock Hill Printing & Finishing Co.), Rock Hill; H. L. Sneed, Jr. (Supt., Florence Schools, District #1), Florence; and J. B. Redfearn, Hartsville.

COLLEGE ACADEMIC CALENDAR CHANGE SCHEDULED FOR 1965

Following recommendation by the Academic Faculty Senate, the Educational Council has agreed to change the academic calendar, effective in August, 1965, to allow termination of the first semester prior to the Christmas holidays. President Edwards advised the Council that Winthrop College, South Carolina A & M, and The Citadel would also adopt the change; and that the private colleges would be advised of the forthcoming change and requested to consider similar action.

The change of calendar is to be worked out by the director of admissions and registration, with faculty and administrative assistance.

"E" GRADE TO BE DROPPED FROM COLLEGE GRADING SYSTEM

In response to a request from the Academic Faculty Senate, the Educational Council has voted to delete the grade of "E" from the grading system, effective with the first session of summer school, 1964. President Edwards informed the Council that all the South Carolina state-supported colleges (except the Medical College) had agreed to a grading system of A, B, C, D, F, I, WP and WF; and that all were moving toward the 4.0 grade-point-ratio system.

MINUTES: THE FACULTY SENATE OF CLEMSON COLLEGE

The ninety-sixth meeting of the Academic Faculty Senate of Clemson College was held on Tuesday, April 14, 1964, in the auditorium of Olin Hall with President J. G. Dinwiddie, Jr., presiding. Having a quorum present, the meeting was called to order, and the reading of the minutes was dispensed with.

Professor Dinwiddie opened the meeting, calling for further discussion on the proposed changes of the Constitution and By-Laws of the Faculty and Faculty Senate.

Professor Lewis Hill moved to amend the second draft of the proposed changes in the By-Laws by including the exclusion of faculty members assigned to off-campus research stations as members of the Faculty Senate and the exclusion of the same faculty members in determining the apportionment of representation in the various schools. (Specific clauses to be amended are: Art. II, Sec. 1, paragraphs 1 and 7.)

Professor M. A. Owings moved to postpone the issue of voting on the Constitution and By-Laws until this body takes action on whether to consolidate or not to consolidate the Research Faculty with the Academic Faculty. Professor C. A. Reed seconded the motion. After a lengthy discussion, the motion was voted on and carried.

Professor H. N. Cooleage, Jr., moved that the Faculty Senate indicate its approval of the possibility of a merger of the Research Faculty and the Academic Faculty, subject to such rules and regulations as the Senate deems proper, that is, the provisions of the Amended Constitution and By-Laws. This motion was seconded by Professor T. R. Adkins. After a lengthy discussion, the question was called. The final result was 19 negative votes, 10 affirmative votes and 1 abstention.

MINUTES: THE FACULTY SENATE OF CLEMSON COLLEGE (continued)

Professor T. A. Campbell, chairman for the Admissions and Scholarship Committee reported the Committee recommended that, since Clemson College is not located in an urban community, night classes should not be considered until there is sufficient demand. It was moved that this recommendation be put in the form of a motion. The motion was seconded. The recommendation was carried.

Professor Campbell also reported that his committee has been approached on the problem of Clemson's continuing enrollment requirement being unrealistically low. Also, something should be done to prevent a student from graduating with a "D" average in his major field. In order to pursue this subject, the Committee recommended that the Committee ask the Registrar's Office to supply figures on the number of students who graduate after making a G.P.R. of 1.4 or less at the end of their first year and a G.P.R. of 1.6 or less at the end of their sophomore year, and the number who graduate with a G.P.R. of 2.00 or less in their major field.

There was no report from the Welfare Committee.

President Dinwiddie recognized the retiring senators and urged the group to send replacements who have a real interest in the Senate.

President Dinwiddie also reminded the group that at the May meeting there would be an election of officers.

Under new business, Professor John Miller requested the following two projects be assigned to the proper committees:

- (1) Professor Miller requested that a committee study the present regulations on cheating and give positive recommendations as to how they should be interpreted.

This project was assigned to the Admissions and Scholarship Committee.

- (2) The feasibility of the creation of a faculty committee to make recommendations to the Book Store.

This project was assigned to the Policy Committee.

Professor T. R. Adkins brought up the fact that no signs can be found in the area to show that this is Clemson University and that this should be done. It was suggested that Vice-President Bryan should be called and informed of this suggestion.

President Dinwiddie submitted the following proposed amendment to the Constitution, to be adopted at the next meeting, in compliance with the Constitution:

"The word 'university' shall replace the word 'college' throughout the Constitution and By-Laws where it is used as part of the name of the school, part of the title of an administrative official, or in a general sense. The word 'school' when it is used to refer to a subdivision of the University shall be changed to 'school or college' as appropriate."

There being no further business, the meeting adjourned.

Members Absent:

Flatt, J. L.

LaGrone, J. W.

Susan Brown, Secretary

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MINUTES OF THE RESEARCH FACULTY COUNCIL

The regular meeting of the Research Faculty Council was called to order at 3:45 p.m., April 13, 1964, by Chairman C. E. Bardsley.

A tentative date for the regular May meeting of the entire research faculty was set as 4:00 p.m. on Friday, May 15, 1964. (This date has been confirmed.)

The Policy Committee reported on a study concerning areas of activity for the Council. Among the items considered was the establishment of a regularly scheduled monthly meeting of the Research Faculty Council. Work has been initiated to establish such a schedule.

The committee studying outside work submitted a policy proposal for the consideration of the Council. The proposal was approved by the Council for submission to the college administration for their consideration.

Another committee submitted a proposal for the establishment of a designated graduate faculty. This proposal, too, was approved for transmittal to the administration for consideration.

The meeting was adjourned at 5:45 p.m.

Alvon C. Elrod, Secretary

RESEARCH GRANTS

Several research grants have been awarded since the last issue of the Newsletter. These are:

From N.S.F., \$19,920 to John Uldrick (EM) for a study of the efficiency of propulsion of swimming flexible two-dimensional bodies of finite thickness.

From U.S.D.A., \$67,000 to entomology for research on the face fly.

From the American Can Company, a \$2,100 machine to be used in dairy research and teaching programs.

From the Southern Nitrogen Company, an \$1,800 gift of chemicals to the agronomy research group.

From the Mobil Chemical Company, \$1,000 to entomology for research on pesticidal composition MCA-600.

From the General Chemical Division of Allied Chemical Corporation, \$500 to entomology for research on pesticidal compounds GC 9160 and GC 9879.

From the Chemagro Corporation, \$2,000 to botany and bacteriology for research involving seed treatment.

From Diamond Alkali Company, \$500 to botany and bacteriology for product evaluation.

From W. R. Grace and Company, \$1,500 to the Sandhill Station for research on peach tree fertilizers.

CUMULATIVE GRADE-POINT-RATIOS

The table below gives the cumulative grade-point-ratios of students enrolled for the second semester. Graduate students, postgraduates, and students who entered Clemson at the start of the current semester are not included.

Cumulative Grade-Point Ratios	Students enrolled for the second semester 1963-64				
	Freshmen	Sophomores	Juniors	Seniors	Total
3.80 - 4.00	15	4	3	8	30
3.60 - 3.79	14	12	6	15	47
3.40 - 3.59	25	11	15	22	73
3.20 - 3.39	34	25	15	25	99
3.00 - 3.19	33	30	16	36	115
2.80 - 2.99	33	56	18	54	161
2.60 - 2.79	57	53	45	52	207
2.40 - 2.59	70	73	56	85	284
2.20 - 2.39	69	83	79	104	335
2.00 - 2.19	118	94	101	144	457
1.80 - 1.99	86	82	98	154	420
1.60 - 1.79	85	121	152	84	442
1.40 - 1.59	146	168	25	6	345
1.20 - 1.39	211	29	1	0	241
1.00 - 1.19	213	6	0	0	219
0.80 - 0.99	133	2	0	0	135
0.60 - 0.79	72	3	0	0	75
0.40 - 0.59	57	3	0	0	60
0.20 - 0.39	24	2	0	0	26
0.00 - 0.19	14	1	0	0	15
Total	1509	858	630	789	3786
Median	1.41	2.00	2.08	2.20	1.94
Mean	1.64	2.11	2.17	2.34	1.98

JUNIOR-SENIOR, MAY 8-9

The Central Dance Association announces the following schedule for the 1964 Junior-Senior dance weekend:

Friday, May 8, formal dance, Fieldhouse, 9:00 p.m. to 1:00 a.m., the Billy Butterfield Orchestra, with Dottie Smith, vocalist. Price---\$3 per couple.

Saturday, May 9, free concert, Amphitheater, 2-4:00 p.m., Lester Flatt and Earl Scruggs; informal dance, Fieldhouse, 8:00 p.m. to 12-midnight, The Falcons, with the Otis Redding Band. Price---\$4 per couple.

A block ticket for both dances may be purchased for \$6.

PERSONAL MENTION

J. B. Cooper (Poultry Sci) has been granted a one-year extension of his leave to work and study in Indonesia.

D. C. Sheldon (Math) attended an invitational conference on pre-graduate mathematics in Dallas, Texas, April 15-19. The conference was sponsored by a committee of the Mathematical Association of America.

C. E. Littlejohn (Chem Engr) was a member of the ECPD accrediting team which visited Manhattan College April 18-22.

J. L. Tilley (Math) presented a paper to the mathematics faculty of East Carolina College on April 15.

J. S. Dees and C. H. Farnsworth (Soc Sci) have been granted leave for the forthcoming academic year to do graduate study.

M. C. Palmer (Math) has been elected to the six-man executive board of POOL (the organization of users of General Precision Computers).

G. C. Hall, M. H. South, H. B. Bryan, H. L. Laws and C. H. Edwards (English and Mod Lang) have resigned their instructorships to continue work toward doctorates.

C. H. Whitehurst (IM) is the author of an article in the Transportation Journal (Spring, 1964). He also read a paper at the April 24-25 meeting of the S. C. Academy of Science at Aiken.

F. B. Brown (Chem) will do research at Oak Ridge National Laboratory this summer, investigating the Raman spectrum of a series of related molecules.

A Clemson student, Robert E. Dye, won the cup signifying first place for the best student technical paper presented at the annual meeting of the Student Chapter of the American Society of Civil Engineers held in Charleston on April 11. Jack C. McCormac is faculty advisor for the group.

C. Q. Brown (Geology) recently presented a technical paper on "Alluvial Fans" before the Southeastern Section of the Geological Society of America. The meeting was held in Baton Rouge, Louisiana.

J. E. Hair (Student Health) was elected chairman of the athletic medicine section at the national meeting of the American College Health Association. The chairmanship includes membership in the Association's main council.



C L E M S O N

Newsletter

NOT FOR PUBLICATION

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

Vol. 3 No. 15

May 15, 1964

CALENDAR: MAY 18-JUNE 10

- May 18-June 4 Exhibition of student theses and other school work in architecture.
Lee Gallery.
- May 20 W Laicos Club, 8:15 p.m., Clemson House.
- May 20 W Newcomers Club, 8:00 p.m., Clemson House.
- May 25 M Forum Club, 7:00 p.m., Chemistry Building Conference Room.
- May 27 W Graduate Wives, 8:00 p.m., Clemson House.
- May 29 F Academic Faculty meeting, 11:00 a.m., Chemistry Auditorium.
- May 30 S Reception for faculty and seniors, 2:30-3:30 p.m., President's Home.
- May 30 S Graduation exercises, 5:00 p.m., Outdoor Theater.
- June 5-7 F-S Alumni Reunion Weekend.
- June 5 F Alumni Seminar on College Admissions, 2:30 p.m., Civil Engineering Auditorium.
- June 5 F Reception for Alumni, 8:00 p.m., President's Home.
- June 6 S Alumni Banquet, 7:00 p.m., College Dining Hall.
- June 8 M Matriculation, new students.
- June 9 T Registration, first summer session.
- June 10 W Summer session classes begin.

"THIS IS CLEMSON" MOVIE ON TELEVISION

The movie, "This Is Clemson," will be shown on South Carolina television twice in May. The listings:

Sunday, May 17, 4:00 p.m., WFBC-TV, Greenville.

Sunday, May 24, 4:30 p.m., WSPA-TV, Spartanburg.

EXAMINATION SCHEDULE

Examinations in subjects which meet:

8 MWF	will be held	1-4 p.m.	Thursday	May 21
8 TThS	will be held	8-11 a.m.	Friday	May 22
9 MWF	will be held	1-4 p.m.	Wednesday	May 20
9 TThS	will be held	1-4 p.m.	Friday	May 22
10 MWF	will be held	8-11 a.m.	Monday	May 25
10 TThS	will be held	8-11 a.m.	Thursday	May 21
11 MWF	will be held	8-11 a.m.	Saturday	May 23
11 TThS	will be held	8-11 a.m.	Wednesday	May 20
12 MWF	will be held	1-4 p.m.	Saturday	May 23
1 MWF	will be held	7-10 p.m.	Saturday	May 23
2 MWF	will be held	1-4 p.m.	Monday	May 25
3 MWF	will be held	8-11 a.m.	Wednesday	May 27
1, 2, 3 TTh	will be held	7-10 p.m.	Tuesday	May 26

Special Examinations

A special schedule for the subject indicated below has been arranged in accord with the provision that where there are more than four sections of the same freshman subject, the schedule committee may be requested through the department head to schedule a group examination.

Math 103	8-11 a.m.	Tuesday	May 26	As announced
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Due to schedule difficulties, examination in the following subject has been especially arranged:

IE 201	1-4 p.m.	Tuesday	May 26	As announced
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The regular schedule of classes for the semester will continue until 1 p.m., Tuesday, May 19. No examinations, special or otherwise, will be held on Tuesday afternoon, May 19.

All grades for candidates for graduation are due in the Deans' offices NOT LATER THAN 10 a.m., Tuesday, May 26. Such candidates for graduation as have examinations scheduled for 8 a.m., Tuesday, May 26, or a later time may arrange with the professors concerned to stand examinations in these subjects ahead of schedule.

All other grades are due in the Deans' offices NOT LATER THAN 2 p.m., Thursday, May 28.

ALUMNI REUNION WEEKEND: RECEPTION, SEMINAR, BANQUET

Clemson faculty and staff and their wives are invited to attend an informal reception at the President's Home, Friday evening, June 5, from 8 to 10 p.m. President and Mrs. Edwards will be hosts to visiting alumni who will be on the campus for reunion weekend activities June 5, 6, and 7. Faculty and staff are invited to attend the reception and join in welcoming alumni.

The third annual Alumni Seminar program will be held this year on Friday afternoon, June 5, at 2:30 p.m. in the Civil Engineering Auditorium. The program will be conducted by Vice-President for Academic Affairs J. K. Williams and Director of Admissions and Registration Kenneth Vickery, and will include showing the campus movie "This Is Clemson." Faculty and staff are invited to attend.

Tickets are now on sale at the Trustee House for the Alumni Banquet to be held in the College Dining Room, Saturday evening, June 6, at 7 p.m. Faculty and staff may purchase their tickets in advance now, or obtain them the day of the banquet on the Loggia of the student dormitories. Feature of this year's banquet will be the presentation of Distinguished Alumni Awards to William Folk, Jr. '37, R. Frank Kolb '20, Amos U. Priestner, Jr. '32, James H. Sams '24, and Joe Sherman '34.

NOTES ON THE FACULTY

Exclusive of various lecturers and graduate assistants, the total number of people employed full or part-time for teaching is 324. Of these, 91 are in agriculture, 17 in architecture, 128 in arts and sciences, 66 in engineering, and 22 in industrial management and textile science.

The average teaching experience at Clemson is 10.9 years per person. By schools this ranges as follows: agriculture, 9.8 years; architecture, 5.3 years; arts and sciences, 11.5 years; engineering, 10.6 years; and industrial management and textile science, 17.9 years.

During the academic year 1963-64, three faculty members have retired due to age, 11 have resigned, and 19 have been granted leaves of absence for graduate study or other purposes.

Members of the faculty read 92 papers to professional groups or associations during the year, and 20 faculty people were elected to office in professional associations. Eight members of the faculty were invited to serve on accreditation panels at various colleges and universities, and 17 members of the faculty were awarded special fellowships or study awards for programs not associated with work toward an advanced degree.

LECTURES ON CAMPUS: A SUMMARY REPORT

During the 1963-64 academic year 63 lecturers visited the campus for talks to faculty and students on a wide variety of subjects. Support for these lectures came from such sources as the Alumni Loyalty Fund for Faculty Development, the National Science Foundation Institutional Grant, the Glidden Foundation, the Swint Foundation, and the Oak Ridge and Savannah River AEC Laboratories.

FACULTY ADDITIONS

New faculty men who will join the College in September, and whose employment has not been previously announced, include:

IM - Sang Oh Park of Seoul, Korea, and Albuquerque, New Mexico, will become an assistant professor. He holds bachelor's and master's degrees from Florida State and a Ph.D. from the University of North Carolina. He has four years of teaching experience, and is currently assistant professor of business administration at the University of New Mexico. Dr. Park, who is married to the former Barbara Brown of East Stroudsburg, Pa., is the author of several professional articles in various journals and reviews.

IM - Samuel M. Willis of Tryon, N. C., and Spartanburg, will become an associate professor. He holds a bachelor's degree from Clemson, a master's from Georgia Tech, and a Ph.D. from the University of Alabama. He has had 11 years of teaching experience (seven of them at Clemson) and is currently plant manager of Milliken Tetra Pak. He is married to the former Martha Gravely of Walhalla and they have four children.

IM - Cyril O. Shuler of Montmorenci, S. C., and Maxwell Air Force Base, Alabama, will become assistant professor. He holds a bachelor's from Clemson, a master's from the University of Pittsburgh, and is a doctoral candidate at American University. Currently he is a thesis advisor with the Air War College, Maxwell AFB. He has taught with the University of Maryland's overseas program. Colonel Shuler is married to the former Elizabeth Smith of Auburn, Alabama, and they have two children.

Agricultural Engineering - Robert E. Williamson will become a research assistant. His bachelor's and master's work has been done at Clemson.

Economics - Nicola Vulkovic of Beograd, Yugoslavia, and Durham, N. C., will become an instructor. His education includes study at the University of Beograd, the University of Geneva, McGill University in Canada, and Duke University. He holds the M.A. from McGill, and has been an economist with the Department of Industry and Commerce, Quebec. His wife Violette, is a native of Pornentray (Berne), Switzerland, and they have one child.

Mathematics - Bobby J. Prochaska of Alexandria, Louisiana, and Fort Collins, Colorado, will become an instructor. He holds a bachelor's degree from SW Louisiana University and a master's from Colorado State. A member of the Association for Computing Machinery, he has done statistical work for NASA in Huntsville, Alabama, and has had two years of experience as a graduate teaching assistant. He is married to the former Paulette Fischer of Lafayette, Louisiana, and they have one child.

Economics - Stephen L. Shapiro of Jersey City, N. J., and Salt Lake City, Utah, will become an instructor. He has the bachelor's degree from the University of Oklahoma and is a candidate for the Ph.D. at the University of Utah. He has had three years of teaching experience as a graduate assistant. He is married to the former Frances Davis of Washington, D. C.

POLICY CHANGE REGARDING ACADEMIC DISHONESTY

Previously all formal actions concerning cases of cheating in classes and labs (and other forms of academic dishonesty) have been taken by Dean Walter Cox. Since such matters directly involve academic performance, the Dean of the College will in the future have full responsibility. This will include the determination of action to be taken, the writing of appropriate letters to students and their parents and the conducting of interviews with students or parents. Faculty members will continue to report cases of academic dishonesty to department heads, as they have in the past.

GRADUATE COUNCIL MINUTES

The Clemson College Graduate Council met in the Graduate Office at 2:00 p.m. on Wednesday, April 23, with Dean H. H. Macaulay presiding.

The minutes of the January 22, 1964, meeting were approved.

After receiving supporting information from Dean Wiley and Dr. Jones, the Council recommended for approval by the administration two new doctoral programs, in nutrition and animal physiology.

The Council next considered and recommended to the administration a proposal that there be offered a mathematics option for those seeking the M.Ed. degree.

Following some discussion which clarified the nature and effect of the proposed action, the Council endorsed a request that the Department of Industrial Engineering be authorized to offer courses leading to a minor at the master's level.

In the interest of uniformity in the various master's programs in the field of education, Dean Macaulay proposed that the M.S. degree in agricultural education be discontinued and that the M.Ag.Ed. program be reduced from 33 to 30 hours. It was also recommended that the requirements for the M.Ag.Ed. program be:

1. Six to 12 hours in education as a major.
2. Twelve to 18 hours in technical agriculture or related fields.
Six of these hours must be in the same field and will be considered as a minor.
3. Three hours in research technique.
4. Three hours in experimental statistics.

These proposals were endorsed by the Council.

Dean Macaulay requested the opinion of the Council regarding the desirability of deleting from master's and doctor's diplomas the statement of the field of study in which the respective degrees were earned. The Council voted to recommend deletion of the name of the field of study from Ph.D. diplomas, but to make no change in this respect of master's diplomas.

The Council endorsed a proposal by Dean Macaulay that a graduate student or faculty member employed not more than three quarter's time be permitted to take up to nine credit hours of course work during a semester.

GRADUATE COUNCIL MINUTES (continued)

The following proposed new courses were endorsed by the Council for graduate credit:

Agron	525	- Seminar, 1 cr. (1,0)
An Phy	503	- Animal Physiology, 4 cr. (3,3)
An Phy	504	- Animal Physiology, 4 cr. (3,3)
An Phy	505	- Pharmacology, 3 cr. (2,3)
An Phy	591	- Doctoral Research (Credit to be arranged)
Biochem	503	- Intermediary Metabolism I, 4 cr. (3,3)
Biochem	504	- Intermediary Metabolism II, 4 cr. (3,3)
Biochem	506	- Biochemistry of Nutrition, 3 cr. (3,0)
Biochem	508	- Biochemistry of Nutrition Laboratory, 2 cr. (0,6)
Biochem	510	- Advanced Biochemical Techniques and Preparations, 3 cr. (1,6)
Ch	529	- Chemistry and Metabolism of the Carbohydrates, 2 cr. (2,0)
ChE	520, 521	- Unit Operations, 3 cr. (3,0)
	522, 523	
Dy Sc	509	- Rumen Metabolism, 3 cr. (2,3)
EM	632	- Theory of Plasticity, 3 cr. (3,0)
EM	680, 681, 682	- Special Topics in Mechanics, 3 cr. (3,0)
EM	691	- Doctoral Research (Credit to be arranged)
Math	557	- Theory of Numbers, 3 cr. (3,0)
Nutr	551	- Nutrition Seminar I, 1 cr. (1,0)
Nutr	552	- Nutrition Seminar II, 1 cr. (1,0)
Nutr	691	- Doctoral Research, (Credit to be arranged)

J. M. Stepp
Secretary

RESEARCH AND STUDY GRANTS

The following grants and gifts have been reported since the May 1 issue of the Newsletter:

From The Foundry Educational Foundation of Cleveland, Ohio, \$500 to the College for use in educational programs.

From NIH, \$6,500 to J. W. Huffman (Chem) for renewal of his grant dealing with "Conversion of Resin Acids to Steroid Analogs."

From NSF, \$16,720 to mechanical engineering for the purchase of undergraduate scientific equipment.

From NSF, \$6,500 to botany and bacteriology for the purchase of undergraduate scientific equipment.

From NSF, \$10,000 to Duane Bruley (Chem Engr) for process dynamic studies of distributed parameter simultaneous heat and mass transfer systems.

RESEARCH AND STUDY GRANTS (continued)

From the American Association of University Women's College Faculty Program, a fellowship to Mrs. R. S. Lambert to support her study toward the M.A. degree in English at Clemson. This fellowship program, whose aim is to increase the resources of qualified personnel for higher education, is supported by a grant from the Rockefeller Brothers Fund.

From the Geigy Chemical Corporation, \$1,500 to entomology and zoology, for research involving tests to determine insecticidal activity of certain experimental insecticides.

From the National Association of Artificial Breeders, \$500 to dairy science for support of the project "Causes of Reproductive Failure in Beef Cattle."

From the Agricultural Society of South Carolina, \$2,000 to the Experiment Station for vegetable research.

From the Skod Company, \$2,800 to horticulture, for research involving the evaluation of seaborne Norwegian seaweed products in the growing of horticultural crops.

SPONSORED RESEARCH RECAP

A comparison of the volume of sponsored research done at Clemson in fiscal year 1960 and fiscal year 1963 has been made as a part of a government study, and is shown below:

Fiscal Year 1960

<u>School</u>	<u>Federal</u>	<u>Other</u>	<u>Total</u>
Agriculture	\$ 669,152	\$ 1,344,634	\$ 2,013,786
Arts & Sciences	11,850	34,112	45,962
Engineering	20,827	27,250	48,077
IM-TS	60,010	21,418	81,428
	<u>\$ 761,839</u>	<u>\$ 1,427,414</u>	<u>\$ 2,189,253</u>

Fiscal Year 1963

Agriculture	\$ 809,818	\$ 1,598,017	\$ 2,407,835
Arts & Sciences	92,954	16,700	109,654
Engineering	220,505	267,145	487,650
IM-TS	48,938	17,447	66,385
	<u>\$ 1,172,215</u>	<u>\$ 1,899,309</u>	<u>\$ 3,071,524</u>

Course preferences of candidates accepted or those assured of an acceptance for entrance in June and September 1964 as compared with May 1, 1963.

MAJOR COURSE	1963 TOTAL		1964 TOTAL		NUMBER OF BOYS, 1964	NUMBER OF GIRLS, 1964
Agriculture	23		14		14	0
Agricultural Economics	0		1		1	0
Agricultural Engineering	15		7		7	0
Agricultural Education	0		5		5	0
Agronomy	3		2		2	0
Animal Science	3		3		3	0
Biology	7		27		19	8
Dairy Science	6		2		2	0
Entomology	0		1		1	0
Food Technology	0		1		1	0
Forestry	28		32		32	0
Horticulture	3		4		1	3
Poultry Science	1		0		0	0
Pre-Veterinary	23		28		26	2
	<u>112</u>	10.1%	<u>127</u>	9.9%	<u>114</u>	<u>13</u>
Architecture	67		98		96	2
Building Construction	7		8		8	0
	<u>74</u>	6.7%	<u>106</u>	8.2%	<u>104</u>	<u>2</u>
Applied Mathematics	34		68		56	12
Arts & Sciences	85		137		121	16
Chemistry	40		40		36	4
Physics	16		28		28	0
Pre-Medicine	71		99		90	9
Med-Technology	0		1		0	1
	<u>246</u>	22.2%	<u>373</u>	29.0%	<u>331</u>	<u>42</u>
Engineering	181		185		185	0
Ceramic Engineering	21		10		10	0
Chemical Engineering	48		66		65	1
Civil Engineering	80		90		89	1
Electrical Engineering	119		121		120	1
Industrial Education	2		4		4	0
Industrial Engineering	19		17		17	0
Mechanical Engineering	81		91		91	0
Metallurgical Engineering	1		1		1	0
	<u>552</u>	49.4%	<u>585</u>	45.4%	<u>582</u>	<u>3</u>
Industrial Management	79		60		59	1
Textiles	17		6		6	0
Textile Chemistry	10		6		6	0
Textile Management	15		13		13	0
Textile Science	2		12		12	0
	<u>123</u>	11.1%	<u>97</u>	7.5%	<u>96</u>	<u>1</u>
Total Expressing Major Course Choice	1107		1288		1227	61
Undecided	<u>72</u>		<u>54</u>		<u>52</u>	<u>2</u>
GRAND TOTAL	1179		1342	*	1279	63

*There are 1,348 current applications yet to be acted upon.

NEW SENATE OFFICERS

At a meeting on May 12 the Academic Faculty Senate elected its officers for 1964-65. The new officers are:

President - J. E. Miller (Physics); V. P. - E. LaRoche (Tex); Secretary - Mrs. Henry Hill (Hist); Committee on Committees - W. P. Byrd (Agron), M. A. Owings (English), T. A. Campbell (Tex), W. G. Hudson (ME), R. H. Hunter (Arch).

NEW SENATORS ELECTED

Elections were held this month by secret ballot to replace Academic Faculty Senators whose terms are to end in May. Election results are:

Agriculture - M. A. Boone (Poultry Sci) and J. M. Stepp (Ag Econ), replacing V. Hurst and T. R. Adkins; Architecture - W. Steward replacing H. N. Cooleage, Jr.; Arts & Sciences - P. Hill (Hist), L. L. Henry (English), C. Q. Brown (Geol), and H. M. Felder (English), replacing S. Brown, C. O. Caskey, J. W. LaGrone, and C. H. Watson; Engineering - H. G. Lefort (CE) and J. T. Long (EE), replacing C. C. Fain and J. C. McCormac; IM-TS - J. J. Porter (TC), replacing J. C. Hubbard.

PERSONAL MENTION

A. R. Abernathy (CE) presented a paper at the May 3-8 Industrial Waste Conference held at Purdue University.

J. B. Copeland (Ag Comm) will be on leave during 1964-65 to do graduate study at the University of Wisconsin.

R. C. Hubbard (Ag Comm) will be acting head of the department during the 1964-65 absence of J. B. Copeland.

W. C. Edel (IM) will be on leave during 1964-65 to do graduate study at the University of Virginia.

R. S. Lambert (Soc Sci) has been elected president of the S. C. Historical Association for 1964-65.

J. F. Andrews (CE) is co-author, with Professors J. F. Thomas and E. A. Pearson of the University of California, of an article in the April issue of "Water and Sewage Works."

J. N. Conis (Mod Lang) has been notified by the Danforth Foundation of his appointment for a two-year period, beginning in September 1964, as a Danforth Associate.

J. K. Williams (Adm) has been appointed a member of the S. C. State Council on Teacher Education.

R. H. Hunter (Arch) is represented in the April 13-May 4 juried "Brockton Art Association Seventh National Show of Art," in Brockton, Massachusetts.

PERSONAL MENTION (continued)

E. Laitala (IE) has been elected chairman of the IE Division, SE Section, American Society for Engineering Education.

C. Q. Brown (Geol), A. W. Snell (Ag Engr), J. Andrews (CE), J. Stepp (Ag Econ), and T. Peele (Agron) have been appointed to the Directorate of the Clemson Water Resources Research Institute. A. W. Snell will serve as chairman for 1964-65.

A. D. Lewis (ME) has been elected to the executive committee of the ME Division of the SE Section, American Society for Engineering Education.

J. C. Martin (EE) has been awarded a \$2,500 postdoctoral summer fellowship by ASEE-NASA. He will do research at the Ames Research Center.

W. C. Godley (An Sci) and V. Hurst (Dy Sci) have been elected to three-year terms on the Research Faculty Council.

C. L. Lane (Forestry) and W. Witcher (Bot) presented a jointly-researched paper to the S. C. Academy of Science on April 24-25 at Aiken, S. C. The paper dealt with studies of fungi from pine and yellow poplar stands. C. R. Miller, W. M. Dowler, and R. P. Ashworth (Bot) also presented a paper at the meeting, on "Observations of the Development of the Primary Root of Prunus Persica (L.) Batsch." L. E. Hill (Econ) and E. A. Thompson (Econ) each presented a paper to the academy's economics section. Dr. Hill's topic was "Notes on Methodological Controversies"; Dr. Thompson's topic was "The Christian Ethic in Judgement of Capitalism."

J. F. Stephens (Poultry Sci) lectured at the University of Tennessee Poultry Short Course on May 5-6.

E. M. Lander (Hist) was a member of the panel on "The Deep South, Past and Present," at the April 24 University of Alabama Conference on Social Sciences and the South.

The Third Edition of "Fundamentals of Horticulture," co-authored by T. L. Senn (Hort), has been selected to be translated into the languages of Asia and Africa. These foreign editions will be published under the sponsorship of a non-profit organization that provides books of American origin to under-developed countries.

W. C. Whitten (Econ) has completed all requirements for the Ph.D. at the University of Alabama. The degree will be awarded at the June graduation exercises.

R. J. Calhoun (English) will be on leave during academic 1964-65 as Clemson's representative in the Cooperative Humanities program at Duke University and the University of N. C.

C. R. Mitchell (EM) has been granted leave for the academic year 1964-65 to do doctoral study at Northwestern University.

O. B. Garrison (Agric) recently attended the Southern Experiment Station Directors meeting in San Juan, Puerto Rico, where he served as chairman of the group.

J. E. Miller (Physics) addressed Phi Eta Sigma, freshman honorary society, May 4, on "Capital Punishment."



C L E M S O N

Newsletter

NOT FOR PUBLICATION

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SOUTH CAROLINA ROOM

Vol. 3 No. 16

May 31, 1964

ALUMNI REUNION WEEKEND: RECEPTION, SEMINAR, BANQUET

Clemson faculty and staff and their wives are invited to attend an informal reception at the President's Home, Friday evening, June 5, from 8 to 10 p.m. President and Mrs. Edwards will be hosts to visiting alumni who will be on the campus for reunion weekend activities June 5, 6 and 7. Faculty and staff are invited to attend the reception and join in welcoming alumni.

The third annual Alumni Seminar program will be held this year on Friday afternoon, June 5, at 2:30 p.m. in the Civil Engineering Auditorium. The program will be conducted by Vice President for Academic Affairs J. K. Williams and Director of Admissions and Registration Kenneth Vickery, and will include showing the campus movie "This is Clemson." Faculty and staff are invited to attend.

Tickets are now on sale at the Trustee House for the Alumni Banquet to be held in the College Dining Room Saturday evening, June 6, at 7 p.m. Faculty and staff may purchase their tickets in advance now, or obtain them the day of the banquet on the Loggia of the student dormitories. Feature of this year's banquet will be the presentation of Distinguished Alumni Awards to William Folk, Jr. '37, R. Frank Kolb '20, Amos U. Priester, Jr. '32, James H. Sams '24, and Joe Sherman '34.

ADDITIONS TO FACULTY AND STAFF

The following persons have been added to the faculty or staff since the May 15 issue of the Newsletter was printed:

Entomology - Sidney B. Hays of Marshall, Alabama will become an assistant entomologist in June. He has his bachelor's and master's degrees from Auburn University and his doctorate from Clemson. He has had five years of full-time teaching and research experience and is the author or co-author of 16 research papers. He is a member of Phi Kappa Phi, Sigma Xi, and other professional societies.

Agricultural Communications - Leonidas C. Smith III of Monroe, N. C. will become assistant television editor in June. He has the B.A. degree from the University of North Carolina where he has been an assistant in the audio-visual bureau.

Geology - Villard S. Griffin, Jr. of Birmingham, Alabama will be an instructor. He holds the B.S. and M.S. degrees from the University of Virginia and completes requirements for the Ph.D. at Michigan State this summer.

FACULTY BASIC RESEARCH COMMITTEE MINUTES AND ACTIONS

The Faculty Basic Research Committee met on May 13 to consider requests for support from the following funds received since May 21, 1963:

Alumni Loyalty Fund	\$ 2,000.00
National Science Foundation	2,000.00
Returned (W. G. Miller)	19.88
Royalties (C. B. Green, E. M. Lander and J. K. Williams)	153.81
	\$ 4,173.69

The Committee approved eight projects listed below and disapproved three projects for which it felt support should be sought from sources outside the college.

The Committee voted to extend to all projects approved at this meeting and in the future, the same provisions it previously applied to support given for publishing books. If a project supported by the Committee results in a tangible product that is later sold, the Committee will first be reimbursed to the extent of its allocation for support of the project.

GRANTS AWARDED

\$138.07 to J. T. Alcorn (Arch) for work in creative sculpture (a reallocation from his previous project).

\$200-300 to R. J. Amundsen (Soc Sci) for work on a biography of Henry S. Sanford.

\$200.00 to Virginia O. Bardsley (Soc Sci) for study of the Irish on the Eastern Frontier (through 1819).

\$1,450.00 to J. C. Fanning (Chem) for construction of a thermobalance and a magnetic susceptibility balance of the Gouy type.

\$40.00 to L. E. Hill (Soc Sci) for work on the history of economic thought.

\$600.00 to Harriet R. Holman (English) for publication of the poetry of Floride Clemson.

\$800.00 to N. P. Marullo and J. G. Dinwiddie (Chem) for work on the proposed synthesis of Ladenburg Benzene and some related bicyclic systems.

\$350.00 to May S. Ringold (Soc Sci) for work on a bibliography of the Confederacy: social and economic conditions.

PUBLIC HEALTH GRANT TO ENGINEERING

The Public Health Service in Washington has renewed its training grants program with the School of Engineering. The renewal is for \$67,350 and will support a number of masters and doctors students.

MINUTES: THE FACULTY SENATE OF CLEMSON COLLEGE

The ninety-seventh meeting of the Academic Faculty Senate of Clemson College was held on Tuesday, May 12, 1964, in the auditorium of Olin Hall with President J. G. Dinwiddie, Jr., presiding. Having a quorum present, the meeting was called to order, and the minutes were approved, after one correction.

President Dinwiddie opened the meeting by recognizing the new senators.

Professor T. A. Campbell, chairman of the Admissions and Scholarship Committee, reported that the Committee had studied the rules and regulations on academic dishonesty and was submitting to the Senate its proposal to revise these rules and regulations.

He reported that the Committee had requested of Registrar Vickery information as to the number of those students dropped from courses for cheating during the last five year period. The following report was given:

1. For the academic year, 1959-1960, a total of 22 students were dropped from courses because of dishonesty;
2. For the academic year, 1960-1961, a total of 20 were dropped;
3. For the academic year, 1961-1962, a total of 9 were dropped;
4. For the academic year, 1962-1963, a total of 5 were dropped; and
5. For the academic year, 1963-1964, a total of 6 students were dropped from courses because of dishonesty.

It was the general feeling of the Senate that there are more students using unfair or dishonest means than show up in this report. It was suggested that the Senate have a call meeting in the summer to discuss this problem.

Professor W. G. Hudson, chairman of the Welfare Committee announced that there will be a mass chest X-ray survey at Clemson during the week of September 21, 1964, and urged all the members of the Faculty and their families to participate.

President Dinwiddie called for a motion to adopt the amendment to the Constitution that was proposed at the last meeting. The motion was made, seconded and carried.

President Dinwiddie made several general announcements.

There being no further old business, the floor was open to nominations for officers for the coming year.

The following officers were elected for the year 1964-1965:

President--John E. Miller
Vice-President--E. A. LaRoche
Secretary--Mrs. Patricia N. Hill

Elected to the Committee on Committees were W. P. Byrd from the School of Agriculture; R. H. Hunter from the School of Architecture; M. A. Owings from the School of Arts and Sciences; W. G. Hudson from the School of Engineering and T. A. Campbell from the School of Industrial Management and Textile Science.

There being no further business, the meeting adjourned.

Members Absent: W. B. Barlage
Davis, L. H.
McHugh, C. M.

Respectfully submitted,

Susan Brown, Secretary

SEPTEMBER DATES

The following September dates may be helpful to faculty in planning for the summer:

<u>Date</u>	<u>Hour</u>	<u>Event</u>
Sept 7	----	All faculty due on campus
Sept 7-8	----	Orientation for new faculty and staff (details later)
Sept 8	1-4 p.m.	New students matriculation
Sept 9	8 a.m.-4 p.m.	New students matriculation
Sept 9	10:30 a.m.	Meeting of faculty and staff, Chemistry Auditorium
Sept 9	8-10 p.m.	President's reception for faculty and staff
Sept 10	8:30 a.m.	New students meet in Auditorium
Sept 10	1:30 p.m.	ROTC new students orientation
Sept 11-12	----	Student registration
Sept 14	----	Classes begin

QUOTATIONS OF INTEREST OR OTHERWISE

---from F. L. Cevezze, in a paper describing the European University (Daedalus, 93, 1964, p. 408)

"Students are attending today a type of university which, in its basic organization, is still that of the last decades of the nineteenth century. Having been created as an elite school with a view to promoting scientific research and to supplying the scientific preparation needed for the practice of professional careers, the university received today a great number of young people who are not asking these goals of it. Very few are concerned with scientific research (and it could not be otherwise); many aspire to a diploma which would qualify them for professional practice; many more, especially in the humanities departments, are seeking a diploma which would (in strictly formal terms) qualify them to compete for civil service jobs or for positions in private employment. There exists, therefore, an extremely marked gap between the cultural patterns which the university has traditionally made its own and the type of training which most university students demand of it. This gap causes a crisis in the university; it initiates a de facto transformation and makes even a de jure reform mandatory."

QUOTATIONS OF INTEREST OR OTHERWISE (continued)

---from Clark Kerr, describing the American public university:

"The multiversity is an inconsistent institution. It is not one community but several---the community of the undergraduate and the community of the graduate; the community of the humanist, the community of the social scientist, and the community of the scientist; the communities of the professional schools; the community of all the non-academic personnel; the community of the administrators. Its edges are fuzzy---it reaches out to alumni, legislators, farmers, businessmen, who are all related to one or more of these internal communities. As an institution, it looks far into the past and far into the future, and is often at odds with the present. It serves society almost slavishly---a society it also criticizes, sometimes unmercifully. Devoted to equality of opportunity, it is itself a class society. A community, like the medieval communities of masters and students, should have common interests; in the multiversity, they are quite varied, even conflicting. A community should have a soul, a single animating principle; the multiversity has several---some of them quite good, although there is much debate on which souls really deserve salvation."

---from S. D. Marble, in a paper on "College Teaching, Today and Tomorrow":

"Finally, I would like to refer to one intangible element that is going to have something to do with the effectiveness of college teaching in the future, and that is the climate or atmosphere in which college instruction occurs. I do not wish to suggest that our colleges are cold and inhospitable places; and yet I am certain that if there were an increase in the concern, the kindness, and the willingness of the school to identify its problems with the problems of the student, the whole educational process---regardless of organization or technology---would be elevated and enhanced. Education needs to have a mixture of two apparently incompatible ventures: It needs to be toughminded and tenderhearted. We need to be as wise as serpents, and as harmless as doves. And I am sure that to the degree that the traditional distance between student and teacher is broken down, to the proportion that a general atmosphere of confidence prevails, and to the extent that employees of the college and students feel they are involved in a common cause---are inseparably and unavoidably involved with one another in a common search for truth---to this extent, all of our other educational efforts will be blessed, and our satisfactions will be many. Our great deficiency is kindness and love. If we can simply care for each other, wonderful things will happen."

CURRICULUM CHANGES AND ADDITIONS

The following curriculum changes and additions have been approved and will be effective July 1:

1. Textiles

The Curriculum Committee of the School of Industrial Management and Textile Science has been in the process of developing a curriculum to be known as a Bachelor of Science in Textiles. This curriculum will replace the BS in Textile Management and the BS in Textile Science.

The new degree will be offered for the first time in the fall of 1965. However, in order that we may go to press for "Clemson Today" it has been necessary to approve the first year of this curriculum for the deadline of this publication. The new first-year curriculum is:

BACHELOR OF SCIENCE IN TEXTILES

Freshman Year

First Semester		Second Semester	
Chem 101 General Chemistry	4(3, 3)	Chem 102 General Chemistry	4(3, 3)
EG 109 Engr. Com & Dsn.	3(1, 6)	Engl 102 Engl. Composition	3(3, 0)
Engl 101 Engl Composition	3(3, 0)	Hist 104 Western Civilization	3(3, 0)
*Text 122 Intro. Textiles	3(2, 3)	Math 106 Anal. Geom.; Cal. I	4(4, 0)
Math 105 Algebra & Trig.	4(4, 0)	*Text 122 Intro. Textiles	3(2, 3)
AS or MS Basic	1(2, 1)	AS or MS Basic	1(2, 1)
	<u>15 or 18</u>		<u>15 or 18</u>

* Note: Freshmen taking Remedial Math (Math 100) will take Text 122 in the second semester; others in the first semester. Freshman advisers may place students in Text 122 for the second semester if this seems advisable.

2. Graduate School

A. Two interdepartmental doctoral programs have been approved--one in nutrition and one in animal physiology. New courses to be offered when needed include:

--An Phy	502--Animal Physiology, 4 cr. (3, 3)
--An Phy	504--Animal Physiology, 4 cr. (3, 3)
--An Phy	505--Pharmacology, 3 cr. (2, 3)
--An Phy	691--Doctoral Research (Credit to be arranged)

CURRICULUM CHANGES AND ADDITIONS (continued)

--Biochem	503--Intermediary Metabolism I, 4 cr. (3, 3)
--Biochem	504--Intermediary Metabolism II, 4 cr. (3, 3)
--Biochem	506--Biochemistry of Nutrition, 3 cr. (3, 0)
--Biochem	508--Biochemistry of Nutrition Laboratory, 2 cr. (0, 6)
--Biochem	510--Advanced Biochemical Techniques and Preparations 3 cr. (1, 6)
--Dy Sci	509--Rumen Metabolism, 3 cr. (2, 3)
--Nutr	551--Nutrition Seminar I, 1 cr. (1, 0)
--Nutr	552--Nutrition Seminar II, 1 cr. (1, 0)
--Nutr	691--Doctoral Research (Credit to be arranged)

B. An option in mathematics is approved for the M. Ed. degree program, now in effect. This adds math to the list of specializations available under the M. Ed. program.

C. The industrial engineering department is authorized to offer courses leading to a minor at the masters level. No new courses are involved.

D. In the interest of uniformity in the various masters programs in the field of Education, the M. S. degree in Agricultural Education is discontinued and the M. Ag. Ed. program is reduced from 33 to 30 hours. Requirements for the M. Ag. Ed. program will be:

- (1) Six to twelve hours in education as a major.
- (2) Twelve to eighteen hours in technical agriculture or related fields. Six of these hours must be in the same field and will be considered as a minor.
- (3) Three hours in research technique.
- (4) Three hours in experimental statistics.

E. New 500-600 level courses are to be offered, as follows:

--Agron 525	--Seminar, 1 cr. (1, 0)
--ChE 520, 521, 522, 523	--Unit Operations, 3 cr. (3, 0)
--EM 632	--Theory of Plasticity, 3 cr. (3, 0)
--EM 680, 681, 682	--Special Topics in Mechanics, 3 cr. (3, 0)
--EM 691	--Doctoral Research (Credit to be arranged)
--Chem 506--Special Topics in Inorganic Chemistry	1-4 cr. (1-4, 0)
--Chem 529--Chemistry of Metabolism of the Carbohydrates	2 cr. (2, 0)
--Chem 536--Topics in Colloid Science (This course replaces Chem 632)	3 cr. (3, 0)
--Chem 537--Quantum Chemistry	3 cr. (3, 0)
--In Ed 545--Curriculum Development in In Ed (This course replaced In Ed 447)	3 cr. (3, 0)

CURRICULUM CHANGES AND ADDITIONS (continued)

--In Ed 540--School Shop Design (This course replaces In Ed 446)	3 cr. (3, 0)
--Math 502--Advanced Linear Algebra (This course will replace old Math 502)	3 cr. (3, 0)
--Math 510--Real Variables I (This course will replace old Math 510)	3 cr. (3, 0)
--Math 511--Real Variables II (This course will replace old Math 511)	3 cr. (3, 0)
--Math 521--Functional Analysis I (This course will replace Math 512)	3 cr. (3, 0)
--Math 522--Functional Analysis II	3 cr. (3, 0)
--Math 557--Theory of Numbers	3 cr. (3, 0)
--Cr En 509--High-Temperature Materials	3 cr. (3, 0)
--Cr En 510--Ceramic Engineering Thermodynamics	3 cr. (3, 0)
--Cr En 511--Ceramic Engineering Kinetics	3 cr. (3, 0)
--Cr En 512--Current Topics in Ceramic Engineering	1 cr. (1, 0)
--Cr En 514--Ceramic Physical Processing	3 cr. (3, 0)
--Cr En 513--Nuclear Ceramics	3 cr. (3, 0)
--Cr En 515--Colloidal and Surface Science	3 cr. (3, 0)
--Cr En 516--Constitution and Structure of Glasses	3 cr. (3, 0)
--Cr En 521--Analytical Procedures and Equipment I (This course replaces Cr En 501)	3 cr. (2, 3)
--Cr En 522--Solid State Ceramic Science (This course replaces Cr En 502)	3 cr. (3, 0)
--Cr En 523--Thermal Properties of Ceramic Materials (This course replaces Cr En 503)	3 cr. (3, 0)
--Cr En 524--Mechanical Properties of Ceramic Materials (This course replaces Cr En 504)	3 cr. (3, 0)
--Cr En 525--Magnetic and Electrical Ceramic Materials. (This course replaces Cr En 505).	3 cr. (3, 0)
--Cr En 526--Ceramic Coatings (This course replaces Cr En 506)	3 cr. (3, 0)
--Cr En 528--Analytical Procedures and Equipment II (This course replaces Cr En 508)	3 cr. (2, 3)
--MetE 502--Research Techniques in Physical Metallurgy	2 cr. (1, 3)
--MetE 505--Physical Metallurgy I	3 cr. (3, 0)
--MetE 506--Physical Metallurgy II	3 cr. (3, 0)

3. New Undergraduate Courses in English and Mathematics

The following undergraduate courses have been approved:

--Engl 303--Voice and Diction	3 cr. (3, 0)
--Engl 306--Debating	1 cr. (1, 0)
--Engl 331--Creative Writing	3 cr. (3, 0)

CURRICULUM CHANGES AND ADDITIONS (continued)

--Engl 443--17th Century Poetry and Prose	3 cr. (3, 0)
--Math 413--Topology	3 cr. (3, 0)
--Math 427--Digital Computer Principles	3 cr. (3, 0)
--Math 428--Artificial Languages	3 cr. (3, 0)
--Math 453--Advanced Calculus I (replaced old Math 453)	3 cr. (3, 0)
--Math 454--Advanced Calculus II (replaced old Math 454)	3 cr. (3, 0)
--Math 457--Applied Mathematics I	3 cr. (3, 0)
--Math 458--Applied Mathematics II	3 cr. (3, 0)

PERSONAL MENTION

R. W. Moorman (EM) attended the annual meeting of the Southeastern Section of The American Society for Engineering Education, held in Asheville, N. C., April 30 thru May 1, in the capacity of secretary. Dr. Moorman was appointed program chairman for the society for the coming year.

R. Abernathy and W. M. Sanders (CE) presented papers at the 19th Annual Industrial Waste Conference at Purdue University, May 5-7. Professor Abernathy's paper was on "Measurement of Microbial Degradation of Sulfonated Lignin"; Professor Sanders' paper was on "Oxygen Utilization by Slime Organisms in Continuous Culture."

W. Schilling (Hist) has resigned his instructorship to accept employment at the College of Wooster.

J. B. Whitney (Bot) will teach summer school at the University of N. C. from July 20 thru August 25.

G. Gage (Textiles - ret) has an article, "History of the Textile School of Clemson College," in the January "Textile History Review."

E. Laitala (IE) is attending a two-week seminar at the University of Michigan (May 25-June 5).

J. F. Pearce and E. A. Thompson (Econ) have been recommended for academic tenure, effective July 1.

C. C. Fain (Cer Engr) will be employed at the Deering Milliken Center in Spartanburg this summer.

W. F. Rochester (EE) will be employed at the Naval Ordnance Laboratory, Silver Springs, Md. this summer.

A. G. Law (EM) will be working with the U. S. Geological Survey in Madison, Wisconsin this summer.

PERSONAL MENTION (continued)

J. A. Chisman (IE) will be a consulting engineer this summer with Consumers Power Company, Jackson, Michigan.

J. H. Couch (IE) will do engineering research with the Lockheed-Georgia Co., Marietta, Georgia this summer.

J. L. Edwards (ME) will be a consultant this summer with the Georgia Power Co.

A. C. Elrod (ME) will do research at the Arnold Engineering Center, Tullahoma, Tennessee this summer.

W. L. Ball (EE), J. E. Brittain (EE), L. K. Dirksen (EM), R. F. Nowack (EM), and B. E. Dunkle (IE) will attend NSF Summer Institutes for faculty members at various campuses this summer.

J. F. Stephens (Poultry Sci) received his Ph.D. in Bacteriology from the University of Tennessee this month.

J. F. Pittman (Ag Econ) has accepted a fellowship beginning September 1964 for study at North Carolina State under a special nine-month program for administrators and specialists sponsored by the Agricultural Policy Institute.

J. F. Miles (Ag Econ) is co-author, with Dr. E. P. Roy of Louisiana State University, of an article published in the "Louisiana Rural Economist," May 1964.

W. C. Whitten (Econ) will spend five weeks at Iowa State University this summer, doing post doctoral study in economics.



C L E M S O N

Newsletter

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July 1, 1964

FELLOWSHIPS AND RESEARCH GRANTS AVAILABLE TO FACULTY

The Graduate School has recently been notified of the following grants for further study and research. A file with complete information about each grant is available in the Graduate School office.

1. Aid for further graduate study:

A. Fulbright-Hays Fellowships for Graduate Study and Research. Approximately 800 fellowships tenable in 35 countries will be awarded. Awards are available in all fields of study and cover travel, tuition, and maintenance. Application should be made before November 1.

B. National Science Foundation--Cooperative Graduate Fellowships. Given to about 1,300 students for study in the sciences and most of the social sciences. Applicants are selected on the basis of academic ability; the Graduate Record Examination is important as a measure of academic ability. Stipend will be \$2,400 to \$2,800 for 12 months, plus tuition and \$500 per dependent. Applications are submitted by the school in which the student wishes to enroll and are due before November 2.

C. National Science Foundation Graduate Fellowships. About 1,900 graduate fellowships will be awarded to superior students for study in the sciences. High academic standing and high Graduate Record Examination scores are important. Stipend is \$2,400 to \$2,800 for 12 months study plus tuition and \$500 per dependent. Application should be filed by December 11.

D. Marshall Scholarships. Twenty-four Marshall Scholarships are offered annually by the British Government to enable American students to study in British Universities with a view to taking a degree. Applicants must be under age 26. Stipend is £ 500 (plus £ if married). Applications must be in by October 22.

E. Rhodes Scholarships. Thirty-two scholarships are open to unmarried male citizens of the U. S. between ages 18-23 (as of 10-1-64) for two years of study at Oxford in one of 18 fields, including history, chemistry, forestry, agriculture, and physics. Stipend is £ 900/yr. Applications must be submitted by early October.

2. Aid for further faculty study or research:

A. Fulbright-Hays Fellowships for University Lecturing and Advanced Research. From two to 37 awards are available in each of 38 countries in Europe, Africa, South and East Asia, and the Near East. Awards cover round trip travel for the grantee, a maintenance allowance, and incidental allowance are made in all fields of study. Many awards do not require knowledge of a foreign language. Applications should be filed before August 1, 1964.

FELLOWSHIPS AND RESEARCH GRANTS AVAILABLE TO FACULTY (continued)

B. National Science Foundation

(1) Science Faculty Fellowships. About 350 awards will be given for study or research to help improve the effectiveness of teachers of science subjects. Grants may be for graduate or postdoctoral study. Applicant must have three years teaching experience and intend to continue teaching. Stipends are \$5,500-\$15,000 for a calendar year. Summer Fellowships are also awarded. Submit applications by October 12, 1964.

(2) Postdoctoral Fellowships. About 75 awards will be given to citizens who have demonstrated ability and special aptitude for advanced training in the sciences, for planned study or research at the postdoctoral academic level for nine to 12 months. Stipend: \$5,500 plus \$500 per dependent. Submit applications by September 8, 1964.

(3) Senior Postdoctoral Fellowships. About 100 awards will be given to help individuals several years past their doctoral degree to supplement their training by increasing their competence in their specialized field or by broadening their competence in related fields of science. Awards are for study or research. Stipend will match the fellow's 1964-65 salary. Submit applications by October 12, 1964.

C. National Science Foundation Basic Research Grants. The National Science Foundation will entertain at any time proposals for support of basic research in all areas of science, specifically designated as the mathematical, physical, engineering, biological, medical, and social sciences. There is no prescribed form to be filed but the Foundation does ask that certain information be supplied. Contact the Graduate School for further details.

D. NATO Postdoctoral Fellowships in Science. Approximately 55 fellowships will be awarded for full time study or research in the sciences. Study will be abroad for one year in one of the NATO countries. Evaluation and selection will be solely on the basis of ability. Stipend will be \$5,500 plus allowances of \$500 for spouse and \$500 for each child up to a maximum of two. A travel allowance is also given. Applications must be submitted by October 5.

E. American Association of University Women Fellowships. Fellowships will be given to 40 women who hold the doctorate or lack only completing the dissertation. Stipends are \$3,000 to \$5,000 for one year. There are no restrictions as to age or field. Applications must be filed by December 1.

F. American Council of Learned Societies Fellowships and Grants. These grants are given for work in the humanities and social sciences. A number of programs are supported with application dates ranging from October 1 to December 15.

RESEARCH AND STUDY GRANTS

The following grants and fellowships have been announced since the last issue of the Newsletter:

From Dow Chemical Company, \$1,000 to chemical engineering for graduate or undergraduate fellowships.

From Standard and Poor's Corporation, their publication "Industrial Surveys." These are available for use in Serrine Hall Library.

From Columbia Nitrogen Corporation, \$2,508 to animal science for research involving "Soybeans for Supplementing the Nutritive Value of Coastal Bermuda Hay for Ruminants."

From Shell Development Company, \$600 to entomology for research involving tests with SD 9129 and other Shell Development Compounds on insects attacking soybeans.

From Geigy Chemical Corporation, \$1,500 to entomology for research involving the Effectiveness of Dimetilan and other pesticides for the control of external parasites of livestock.

From Tennessee Coal and Iron Division, U. S. Steel Corporation, \$3,000 to agronomy for research involving the comparison of Ensley Slag and Fairfield Slag for plant growth.

From Babcock and Wilcox, \$1,100 to the College of Engineering for unrestricted use in research and faculty development.

From the David Schwartz Foundation, a group of scholarships for undergraduates in IM-TS, valued at \$500 each, to be known as the "Jonathan Logan Scholarships."

SUMMER ENROLLMENT DATA

There are 1,532 students enrolled in the current first summer session as compared with 1,347 in 1963. Of these, 1,341 are men and 191 are women.

Continuing students who number 1,089 constitute most of the enrollment. There are 170 new students: high school 123; graduate, 25; and transfer, 22. Special summer school students total 196 and former students returning number 77. There are 281 students enrolled in graduate courses.

Also on the campus this first session, in addition to the regularly enrolled students, are 198 others: 97 in the Junior Engineers and Scientists program, 30 in the Summer Science Program in Biological Sciences for High School Students, 51 in Courses for Professional Development offered by the School of Industrial Management and Textile Science, and 20 in the Bell System Regional Communications School.

FACULTY ADDITIONS

The following persons have been added to the faculty since the June 1 issue of the Newsletter was printed:

English - John Lane Idol, Jr. of Deep Gap, N. C. and Fayetteville, Arkansas will become an assistant professor in September. He has the B.S. degree from Appalachian State Teachers College and the M.A. from the University of Arkansas. He expects the Ph.D. from Arkansas in January, 1965.

Mr. Idol has had four years of teaching experience in high school and college. He is a member of Phi Beta Kappa and Pi Gamma Mu, and is the author of a writing guide for intermediate composition. He is married to the former Marjorie Ann South of Boone, N. C.

English - Carroll W. Jennings of Lubbock, Texas will become an assistant professor in September. He holds B.A. and M.A. degrees from Texas Technological College where he has been on the faculty for the past three years.

English - John A. Yount of Durham, New Hampshire will become an assistant professor in September. He holds the B.A. from Vanderbilt and the master's from the University of Iowa. For the past two years he has been teaching at the University of New Hampshire. He is married to the former Susan Childs of Kingsport, Tennessee and they have two children.

Physics - John L. Ging of Hornell, New York will become an assistant professor in September. He holds the B.A. from Alfred University, the M.S. from the Carnegie Institute of Technology, and the Ph.D. from the University of North Carolina. For the past year he has been on the faculty at the University of Virginia. He is married to the former Eleanor O'Meara of Charlottesville, Virginia and they have one child.

History - Paul A. Klevgard of Iron Mountain, Michigan and Evanston, Illinois will become an instructor in September. He holds the B.S. degree from the University of Wisconsin and the M.A. from Northwestern University. His major field is European History.

Mathematics - Edward L. Bethel of Galesburg, Illinois will become as associate professor in September. He has the B.A. from Southern Methodist University, the M.A. from North Texas State, and expects the Ph.D. this year from the University of Texas. He has had eight years of college teaching experience plus experience in systems engineering and computer operation with the aircraft industry.

English - John H. McElroy of Parker's Landing, Pennsylvania will become an instructor in September. He holds the B.A. from Princeton and the M.A. from Duke. His teaching experience includes two years in high school and two years as a graduate tutor at Duke. He is married to the former Onyria Herrera of Cuba and they have three children.

Engineering Mechanics - Shun-Ku Lee of Nationalist China and Huntsville, Alabama will become assistant professor in September.

Dr. Lee was graduated from the National Taiwan University and holds the M.S. and Ph.D. degrees from the University of Illinois. He has been employed since October 1962 as an Aerostructural Dynamics Engineer at the George C. Marshall Space Flight Center, Huntsville, Alabama. His major responsibilities at Clemson will be research and graduate instruction. He is married to the former Una T-Chin Cho and they have one child.

FACULTY ADDITIONS (continued)

Civil Engineering - Ronald L. Sack of Minneapolis, Minn. will become an assistant professor in September. He has a bachelor's, master's and doctor's degree from the University of Minnesota where he has been on the faculty for the past six years. He has also had industrial experience and for the past three years has been engaged by the Minnesota Board of Architects to compose the structural registration examination for architects.

He is married to the former Margaret Polski and they have one child.

History - Leonard J. Newell, Jr. of Dayton, Ohio will become an instructor in September. He has the B.A. degree from Ohio State University and the M.A. from Duke where he has had student teaching experience. He is married to the former Linda King of Fillmore, Utah.

TWO POSTDOCTORAL FELLOWS FROM JAPAN JOIN CHEMISTRY

Takashi Kamiya and Fumio Toda of Japan have accepted postdoctoral fellowship offers in the department of chemistry and geology. Dr. Kamiya joined the department in June; Dr. Toda will come to Clemson later this summer. The two men will join Dr. N. P. Marullo's research group.

Dr. Kamiya has his Ph.D. from the University of Tokyo. Since 1953 he has been a research chemist with Fujisawa Pharmaceutical Company of Osaka.

Dr. Toda holds the doctorate from the University of Osaka. He is author of 17 research papers printed in Japanese, European and American journals.

PROMOTIONS IN RANK

The following faculty people have been promoted in rank, effective July 1, 1964, as noted:

<u>Name</u>	<u>New Rank</u>
C. V. Aucoin (Math)	Professor
R. L. Edwards (An Sci)	Associate Professor
P. E. Robbins (TC)	Associate Professor
H. G. Spencer (Chem)	Associate Professor
M. Steadman, Jr. (Engl)	Associate Professor
R. F. Mixon (Engl)	Assistant Professor
J. B. Simms (Engl)	Assistant Professor
J. L. Flatt (Math)	Associate Professor
M. J. Skove (Phys)	Associate Professor
E. P. Stillwell (Phys)	Associate Professor

COMPARISON OF COURSE PREFERENCES

- 6 -

Course preferences of candidates accepted or those assured of an acceptance for entrance in June and September 1964 as compared with June 1, 1963.

MAJOR COURSE	1963 TOTAL		1964 TOTAL		NUMBER OF BOYS, 1964	NUMBER OF GIRLS, 1964
Agriculture	25		16		16	0
Agricultural Economics	0		1		1	0
Agricultural Engineering	16		7		7	0
Agricultural Education	0		5		5	0
Agronomy	3		2		2	0
Animal Science	2		5		5	0
Biology	7		25		17	8
Dairy Science	6		3		3	0
Entomology	0		1		1	0
Food Science	0		1		1	0
Forestry	29		36		36	0
Horticulture	3		5		2	3
Poultry Science	1		0		0	0
Pre-Veterinary	24		25		22	3
	<u>116</u>	9.7%	<u>132</u>	10.4%	<u>118</u>	<u>14</u>
Architecture	72		93		87	6
Building Construction	10		6		6	0
	<u>82</u>	6.9%	<u>99</u>	7.8%	<u>93</u>	<u>6</u>
Applied Mathematics	34		73		57	16
Arts and Sciences	99		102		82	20
Chemistry	40		43		39	4
Medical Technology	0		1		0	1
Physics	16		29		29	0
Pre-Medicine	74		101		92	9
Pre-Pharmacy	0		2		1	1
	<u>263</u>	22.1%	<u>351</u>	27.7%	<u>300</u>	<u>51</u>
Engineering	186		182		182	0
Ceramic Engineering	21		8		8	0
Chemical Engineering	53		57		56	1
Civil Engineering	93		85		84	1
Electrical Engineering	126		115		114	1
Industrial Education	3		3		3	0
Industrial Engineering	18		17		17	0
Mechanical Engineering	84		94		94	0
Metallurgical Engineering	1		1		1	0
	<u>585</u>	49.2%	<u>562</u>	44.3%	<u>559</u>	<u>3</u>
Industrial Management	90		91		89	2
Textiles	20		11		11	0
Textile Chemistry	12		5		5	0
Textile Management	20		12		12	0
Textile Science	2		6		6	0
	<u>144</u>	12.1%	<u>125</u>	9.8%	<u>123</u>	<u>2</u>
Total Expressing Major Course Choice	1190	100.0%	1269	100.0%	1193	76
Undecided	<u>79</u>		<u>63</u>		<u>60</u>	<u>3</u>
GRAND TOTAL	1269		1332 *		1253	79

*There are about 1250 current applications yet to be acted upon.

GRADUATE COUNCIL MEETING

At its meeting on May 27, the Graduate Council

1. Approved candidates for 33 master's and 4 Ph.D. degrees.

2. Approved a recommendation from a committee headed by Dr. J. E. Miller that in accepting transfer credits from recognized institutions, there be no differentiation between off-campus and on-campus courses that would be accepted toward meeting advanced degree requirements at those institutions.

3. Received as information a report by a committee headed by Dr. R. J. Calhoun dealing with foreign language requirements for graduate degrees. The matter will be on the agenda of the next meeting of the Council.

NEW APPOINTMENTS TO THE GRADUATE COUNCIL

Five members of the faculty have been appointed to the Graduate Council for three-year terms, effective July 1, 1964. The new members are:

John Andrews (CE) replacing A. C. Elrod (ME) whose term has ended.
Victor Hurst (Dy Sci) replacing Jim Stepp (Ag Econ) whose term has ended.
John Kennelly (Math) replacing John Miller (Phys) whose term has ended.
Jim Long (EE). A new position, with a two-year term.
Mark Steadman (Engl) replacing Richard Calhoun (Engl) who is on leave.

VISITING LECTURER AND CONSULTANT PROGRAMS IN ENGINEERING

The College of Engineering will implement this September two activities, each designed to improve its educational programs by bringing to the campus for short visits outstanding people in the field of engineering.

1. Visiting Lecturer Program: This program will bring engineers to the campus for the purpose of delivering formal lectures to undergraduates. A grant of \$2,500 from the General Electric Foundation will be used to support the program.

2. Educational and Research Consultant Program: This program will bring to Clemson outstanding people in engineering to evaluate instructional and research programs and to obtain expert advice and opinion on their conduct. Surplus income from the Higgins Fund will be used for this purpose.

LECTURER ON POPULATION PROBLEMS

Two public lectures will be presented on July 13 by Dr. Kenneth A. Laurence of the Population Council, Rockefeller Institute, New York City. Dr. Laurence is being brought to Clemson under the auspices of the Summer Science Training Program for High-Ability High School Students in the Biological Sciences. Both lectures will be held in Room one, Physics Building. An afternoon lecture will be at 4:00 p.m. and is entitled: "The Population Dilemma." An evening lecture, at 8:00 p.m., is entitled: "Science and Fertility Regulation." The evening lecture is being jointly sponsored by the Clemson Sigma Xi Club.

CLEMSON UNIVERSITY LIBRARY

BOARD OF TRUSTEES MEETING

The University trustees met in Columbia on June 19. Actions taken by the Board included these:

Approved the budget for the fiscal year July 1, 1964 - June 30, 1965.

Increased student fees from \$121 to \$136 per semester.

Authorized the administration to make appropriate changes in titles, design of the Clemson graduate's ring, and the like to designate the institution as a university rather than a college.

Approved a recommendation that Dawson C. Sheldon (Math) and A. E. McKenna (Textiles) be designated as senior professors.

Approved a change in title for J. W. Jones (Agric) from Director of Agricultural Teaching to Director of Resident Instruction and Assistant to the Dean of the College of Agriculture and Biological Sciences.

Confirmed the appointment of Clinton H. Whitehurst, Jr. as Head of the Department of Industrial Management and C. V. Aucoin as Head of the Department of Mathematics.

Confirmed the appointment of A. D. Lewis as Acting Head of Mechanical Engineering and R. C. Hubbard, Jr. as Acting Head of Agricultural Communications.

Approved title changes in the School of IM-TS, as follows:

Name and present title

Title, effective July 1, 1964

Wallace D. Trevillian, Dean, School of Industrial Management and Textile Science, Head of the Department of Industrial Management, and Professor of Economics

Dean, School of Industrial Management and Textile Science, and Professor of Economics

Thomas D. Efland, Associate Dean, Head of Department of Textile Research and Yarn Manufacturing, and Director of Textile Research, and Professor of Textiles

Associate Dean and Director of Research School of Industrial Management and Textile Science, and Professor of Textiles

Thomas A Campbell, Jr., Head of Textile Management Department and Professor of Textiles

Head, Department of Textiles, and Professor of Textiles

Clinton H. Whitehurst, Associate Professor of Industrial Management

Head, Department of Industrial Management and Associate Professor of Industrial Management

Agreed to a recommendation that effective July 1, 1964, the title of every full-time faculty member who is qualified to teach be an approved academic teaching title, and that all research titles of such faculty members be abolished.

Approved a schedule of dormitory rates for non-students who might for any reason be authorized to live in the dormitories for short periods. The rates are:

BOARD OF TRUSTEE MEETING (continued)

For men's dormitory--\$1.00 per night if individual provides his own bed linen, \$1.50 per night if College provides towels and bed linen; for women's dormitory--\$1.50 per night if individual provides her own bed linen, \$2.00 per night if College provides towels and bed linen.

Made necessary arrangements to finance two new dormitories, (one for men and one for women), the new library and other physical plant improvements.

Authorized the administration to adjust fees for special courses and institutes.

Adopted the reports and recommendations of the Fertilizer Inspection Analysis Department and the Poultry-Livestock Laboratory.

PERSONAL MENTION

R. S. Campbell (EM) has resigned his instructorship for reasons related to his health.

E. A. LaRoche (Tex) has been re-elected to the office of secretary of the Textile and Needle Trades Division, American Society for Quality Control.

Mrs. Patricia Wannamaker (Mod Lang) has received her Ph.D. degree from Louisiana State University and will rejoin the faculty in September.

J. M. Ead and J. B. Walkup (EG) have resigned their instructorships. Mr. Ead will continue graduate study at the University of California; Mr. Walkup will accept a research assignment at Rullahoma, Tennessee.

R. Lawton (Ext) has been granted leave this summer to do graduate study at the University of Georgia.

H. W. Askins, Jr. (EE) has resigned his instructorship to do graduate study at Purdue University.

K. N. Vickery (Adm) has been named 1964-65 chairman of the Constitution Committee of the American Association of Collegiate Registrars and Admissions Officers. He is also a member of the Association's Evaluation and Standards Committee.

W. W. Gibson (EM) has resigned his instructorship.

J. H. Mitchell, Jr. (Food Sci & Biochem) was elected to the Board of Directors of the Research and Development Associates of the Quartermaster Food and Container Institute at the 18th Annual Meeting, April 28, 1964, Boston, Mass. The membership of the Research and Development Associates, composed of representatives of leading food and container companies and universities, totals over 300. The annual meeting programs, and military-industry conferences provide technological forecasts of the future feeding needs of the United States and the world and contribute to the solution of existing problems. The Associates also provides a reserve corps of technical men to deal with food and container problems in case of a national emergency.

PERSONAL MENTION (continued)

C. B. Cooper (Alumni) is one of 20 alumni editors in the country selected to participate in a 30-hour "Institute in Alumni Publishing" at the Annual Conference of the American Alumni Council in Denver, July 9-16.

C. W. White (Hist) has resigned her instructorship.

W. C. Mickelberry and E. J. Lease (Food Sci & Biochem) delivered addresses at the joint annual convention of the North Carolina Vending Association held in Asheville, North Carolina, May 22, 1964. Dr. Lease spoke on "Industrial Lunches and Public Health"; Dr. Mickelberry's topic was "Safeguarding Vended Foods from Bacteria."

A. L. Shewfelt (Food Sci & Biochem) presented a paper to the annual meeting of the Institute of Food Technologists held in Washington, D. C., May 24-28. The paper was entitled "Changes and Variations in Pectic Constitution of Ripening Peaches as Related to Product Firmness."

J. Tilley (Math) has resigned his assistant professorship in mathematics to take a position at Mississippi State University. Mrs. Tilley (who expects to receive her degree in architecture from Clemson in August) will be employed with an architectural firm in the Starkville area.

J. E. Miller (Phys) has been appointed to the Athletic Council for a one-year term. J. E. Halpin (Bot) has been reappointed to the Council for a regular three-year term.

J. A. Gilreath (Phys) will continue his leave during 1964-65, to do graduate study at the University of North Carolina. Dean Baugher (Econ) will continue his leave at the University of Georgia.

C. W. Kirkwood (Math) will devote a portion of his time to the Computer Center effective July 1, 1964. His title will be Associate Professor of Mathematics and Computer Analyst.

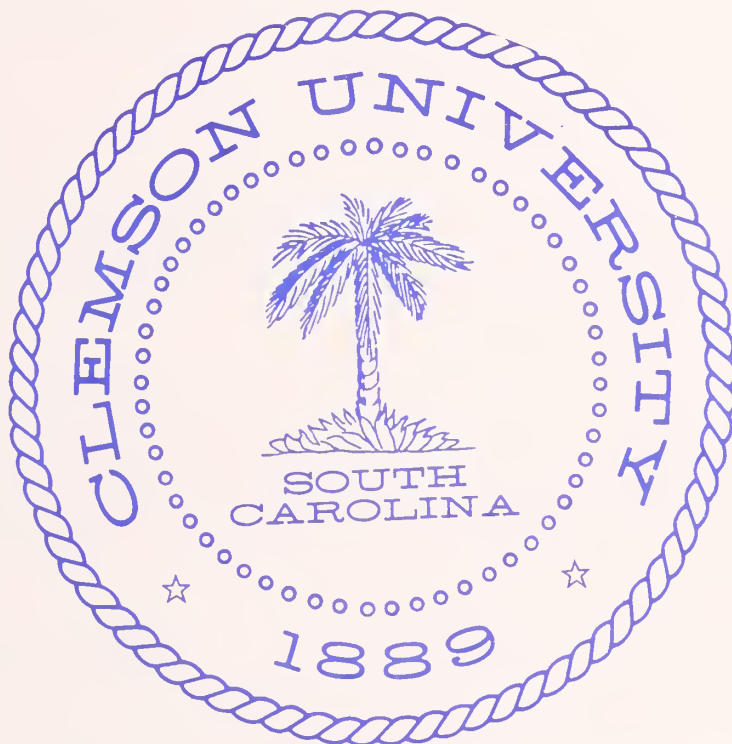
J. F. Pittman (Ag Econ) has been granted leave from September 1 to do graduate study at N. C. State.

R. H. Garrison (Seed Cert) appeared on the program of the American Association of Seed Analysts and Association of American Seed Control Officials in Rochester, New York, June 23.

E. J. Lease (Food Sci & Biochem) delivered the Babcock-Hard address at the annual convention of the Institute of Food Technologists in Washington, D. C.

OFFICIAL SEAL OF THE UNIVERSITY

The Board of Trustees at a meeting on June 19 approved the following as the design for the official seal of Clemson University:



S. C. STATE EMPLOYEES' ASSOCIATION

The 1964-65 South Carolina State Employees Association membership year began July 1 and membership dues for the year are now payable. The Association has sent membership renewal forms to all old members and invites all Clemson employees who are not members of the Association to become affiliated.

SCSEA membership benefits include representation to the General Assembly on key issues; life, health and accident insurance; cooperative credit union; and retail purchase discounts.

At the annual meeting of the Board of Directors, the following Clemson directors were elected for a second term: J. B. Gentry, R. A. Banister and T. D. Efland. One new director from this area was appointed: L. R. Booker, president of the tri-county State Employees Association.



C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 3 No. 18

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

August 1, 1964

SUMMER GRADUATION

Graduation exercises for summer graduates will be held in the University auditorium at 11:00 a.m., Saturday, August 22. Professor Gray Dinwiddie (Chem) will deliver the main address. All faculty and staff are invited. The exercises will be informal.

CONTRACT SIGNED FOR CHEMISTRY WING

The contract for the construction of a new wing to the Chemistry Building (Brackett Hall) has been signed with the Gillespie Construction Company for \$769,808. The new wing will contain about 35,000 square feet and should be completed by July 20, 1965.

APPARENT LIBRARY LOW BIDDER

The Yeargin Construction Company of Greenville was apparent low bidder for the construction of the University library. The bid for construction of \$2,012,789, including a bid of \$319,480 for site development, was submitted by Yeargin. The bids will be reviewed by University officials and the State Budget and Control Board.

CAR POOL MOVES TO NEW LOCATION

Late in July the University car pool moved to its new location near the steam plant (west of the main physical plant building).

PLAQUE TO HONOR FACULTY SCHOLARSHIP WINNERS

The Educational Council has voted to erect a plaque in Tillman Hall to honor the annual winners of the Faculty Scholarship Award. The plaque will be similar to that which now honors the winners of the Norris Medal.

JOHN HUFFMAN WINS RESEARCH CAREER AWARD

J. W. Huffman (Chem) has won a Research Career Award from the National Advisory General Medical Sciences Council. The award includes a stipend of \$16,128 for the first year and will continue for four additional years. The award is made for excellence in research.

GRANTS AND GIFTS

The following grants and gifts have been received by the University since July 1:

From HEW, \$7,139 to engineering for a training program in water supply and pollution control.

From NIH, \$12,475 to F. C. Alley (Chem Engr) for research in air pollution.

From the Alumni Loyalty Fund, \$2,500 to the Faculty Basic Research Committee; \$9,200 to the R. F. Poole Undergraduate Scholarship Fund; \$10,000 to the Graduate School Fellowship Fund; \$4,500 to the Alumni Professorship Fund; \$1,000 to student government; \$13,230 to permanent endowment of the University; and \$10,000 to faculty development.

From NSF, \$11,970 for unrestricted use in science education.

From the Chemstrand Division of the Monsanto Co., \$1,000 for a scholarship in textiles.

From the Allied Chemical Foundation, \$1,500 for scholarships in textile chemistry.

From the National Advisory General Medical Sciences Council, \$16,128 to J. W. Huffman (Chem) as an award.

From J. C. Karcher, \$3,000 to horticulture for graduate student assistance.

From American Humates, Inc., \$3,250 to horticulture for research involving humic acids.

From USDA, \$42,500 to entomology for investigations of tobacco hornworm.

From the Squibb Institute for Medical Research, \$400 to entomology for research in the control of the housefly with apholate.

From the R. J. Reynolds Tobacco Co., \$10,000 for research at the Pee Dee Station.

From the Ideal Cement Co., \$2,000 to ceramic engineering for graduate student assistance.

From Southern Seed Development Co., \$1,800 to the Truck Experiment Station for research involving pickle breeding, processing of new developments and seed increases.

From Monsanto Co., \$1,000 to entomology for testing experimental insecticides on boll weevil and other cotton insects.

From USDA, \$7,000 to agricultural economics for studying the capacity of processing plants for fruits and vegetables in the Southeast.

From Carolinas Golf Course Superintendents Association, \$150 to botany for research involving the evaluation of turf varieties.

LOCATION OF ALUMNI BY STATES

Only one of the 50 states---Wyoming---is having to make its way without a resident Clemson alumnus. All other states have more than one---though Nevada, North Dakota and Vermont have only two each. Here is the geographic rundown as compiled by the alumni office:

Alabama	285	New Hampshire	4
Alaska	4	New Jersey	182
Arizona	20	New Mexico	19
Arkansas	25	New York	202
California	195	North Carolina	1605
Colorado	25	North Dakota	2
Connecticut	40	Ohio	111
Delaware	45	Oklahoma	30
Florida	575	Oregon	9
Georgia	1060	Pennsylvania	175
Hawaii	9	Rhode Island	8
Idaho	4	South Carolina	8018
Illinois	76	South Dakota	3
Indiana	39	Tennessee	280
Iowa	15	Texas	189
Kansas	17	Utah	6
Kentucky	69	Vermont	2
Louisiana	110	Virginia	507
Maine	5	Washington, D. C.	63
Maryland	182	Washington State	21
Massachusetts	78	West Virginia	38
Michigan	36	Wisconsin	15
Minnesota	12	Wyoming	0
Mississippi	50	APO San Francisco	56
Missouri	31	APO New York	91
Montana	4	APO Seattle	3
Nebraska	8	Foreign	92
Nevada	2	NON ALUMNI FACULTY	271

TOTAL 15,023

NOTES ON GRADES

Second Semester

<u>Department</u>	<u>A-B</u>	<u>C</u>	<u>D</u>	<u>F-WF</u>	<u>No. of Grades</u>
Ag Ec	67.2 %	24.1 %	4.3 %	0.9 %	539
Ag Ed	90.0	8.3	0	0	60
Ag Eng	66.3	27.7	5.0	0	101
Agron	51.2	33.0	9.7	2.1	330
An Sci	60.7	29.8	3.4	3.4	265
Bot-Bact	56.6	30.0	7.0	2.8	456
Dairy	92.5	3.2	1.1	0	94
Ento-Zoo	48.4	32.6	10.5	5.0	740
Food Sci	87.5	6.3	0	0	16
Forestry	45.1	37.0	14.5	1.2	173
Hort	87.4	9.4	2.4	0	127
Poultry	76.9	23.1	0	0	39
Total: (Ag)	59.5	27.8	7.1	2.4	2940
Architecture	49.6	38.6	5.6	1.3	826
Chemistry	30.4	27.1	20.6	18.3	1696
Engl-Language	30.4	31.0	19.8	12.3	3455
Math	31.4	25.4	17.5	21.1	2637
Physics	54.6	21.4	11.6	8.4	1502
Music	66.8	26.3	3.7	0.5	217
SocSci	26.7	36.4	21.0	11.7	2911
Air	73.4	21.9	1.3	1.3	772
Army	51.0	37.0	8.0	1.1	1393
Total: (A&S)	37.1	29.6	16.5	12.2	14583
Cer Eng	56.5	31.8	6.2	1.9	308
Chem Eng	61.8	26.1	5.8	2.5	241
C E	51.1	32.0	11.8	2.4	422
E E	40.4	29.6	18.3	8.9	896
E G	39.8	29.1	16.7	9.5	666
E M	36.8	31.4	16.7	10.7	551
I E	52.9	30.2	12.0	1.4	643
M E	36.1	34.1	20.6	5.0	601
Total: (Engr)	44.5	30.7	15.0	6.0	4328
I M - Tex	46.8	30.6	31.8	5.3	1680
UNIVERSITY TOTAL	42.2	30.1	19.5	9.1	24357

GRADUATE SCHOOL SUMMER ENROLLMENT, 1962-1964

	1962		1963		1964	
	<u>1st Sess.</u>	<u>2nd Sess.</u>	<u>1st Sess.</u>	<u>2nd Sess.</u>	<u>1st Sess.</u>	<u>2nd Sess.</u>
<u>Architecture</u>					1	
<u>Agriculture</u>						
Ag. Economics	4	1	2	5	1	
Ag. Education	14	2	2	3	3	
Agronomy	1	0	0	0	4	
Animal Husbandry	0	0	0	0	0	
Animal Science					2	
Bacteriology	1	1	1	1	3	
Dairy	2	1	1	0	4	
Entomology	5	2	3	3	6	
Horticulture	5	0	8	0	8	
Plant Path.	0	0	1	0	3	
Poultry	4	1	2	0	2	
Zoology	3	4	4	1	8	
	<u>39</u>	<u>12</u>	<u>24</u>	<u>13</u>	<u>44</u>	<u>—</u>
<u>Arts & Sciences</u>						
Chemistry	6	2	14	5	25	
Economics					1	
Education	0	0	0	0	0	
Education - Engl	4	3	10	4	8	
Education - Hist	11	4	3	2	4	
Education - Math					4	
Education - Sci	74	11	21	11	17	
English			9	4	8	
Mathematics	8	5	6	12	10	
Physics	4	2	7	4	7	
	<u>107</u>	<u>27</u>	<u>70</u>	<u>42</u>	<u>84</u>	<u>—</u>
<u>Engineering</u>						
Agricultural Engineering	6	1	3	4	3	
Ceramic Engineering	0	0	0	0	1	
Chemical Engineering	6	0	6	3	11	
Civil Engineering	0	0	1	3	4	
Electrical Engineering	1	1	6	2	4	
Industrial Education	3	1	7	5	8	
Materials Engineering					1	
Mechanical Engineering	7	5	7	5	7	
Water Resources Engr	1	1	2	3	12	
	<u>24</u>	<u>9</u>	<u>32</u>	<u>25</u>	<u>51</u>	<u>—</u>
<u>Textiles</u>						
Industrial Management					3	
Textile Chemistry	2	1	1	0	1	
	<u>2</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>4</u>	
Unclassified	14	7	17	5	2	
No Degree					81	
	<u>14</u>	<u>7</u>	<u>17</u>	<u>5</u>	<u>83</u>	<u>—</u>
<u>TOTAL ENROLLMENTS</u>	<u>186</u>	<u>5</u>	<u>144</u>	<u>85</u>	<u>267</u>	<u>—</u>

ACADEMIC FACULTY DATA: JULY 1, 1964

Table I: Degree Strength

<u>Unit</u>	<u>Ph.D.</u>		<u>Masters</u>		<u>Bachelors</u>		<u>Total</u>
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	
Agric	90	73.8	30	24.6	2	1.6	122
Arch	10	55.6	5	27.8	3	1.6	18
A & S	63	46.0	70	51.1	4	2.9	137
Engr*	30	41.7	36	50.0	6	8.3	72
IM-TS	6	23.1	20	76.9	0	---	26
Totals	199	53.1	161	42.9	15	4.0	375**

* The engineering count includes industrial education. Ph.D. percentage in engineering without I Ed is 44.

** The total does not include 24 lecturers in modern languages (1), medical technology (6), agronomy (1), and ROTC (16). Graduate assistants are not counted.

Table II: Rank

<u>Unit</u>	<u>Professors</u>		<u>Assoc. Prof.</u>		<u>Assist. Prof.</u>		<u>Instructors</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Agric	35	28.7	53	43.4	33	27.0	1	0.9
Arch	3	16.7	7	38.9	7	38.9	1	5.5
A & S	22	16.1	41	29.9	51	37.2	23	16.8
Engr	14	19.4	31	43.1	21	29.2	6	8.3
IM-TS	5	19.2	14	53.8	7	27.0	0	
Totals	79	21.1	146	38.9	119	31.7	31	8.3

FAMILY CAMPING AREAS IN SOUTH CAROLINA

The information below was compiled by the Division of State Parks, S. C. Commission of Forestry.

National Forests

No advance reservations accepted.

For detailed information, write:
Forest Supervisor, U. S. Forest Service,
901 Sumter Street, Columbia, S. C.

Francis Marion National Forest

Bonneau	7 mi. north of Moncks Corner via US 52.
Buck Hall	30 mi. northeast of Charleston via US 17.
Huger	11 mi. southeast of Moncks Corner via SC 402.

Sumter National Forest

Cherry Hill	18 mi. north of Moncks Corner via SC 107.
Fork Campground	7 mi. southeast of Clarks Hill off SC 28.
Lick Fork Lake	9 mi. west of Edgefield off SC 23.
Parsons Mountain Lake	6 mi. south of Abbeville off SC 28.

Corps of Engineers Reservoirs

No advance reservations accepted.

Hartwell Reservoir, Manager, Box 278, Hartwell, Ga.
Glenn Ferry Park southeast of Fair Play, S. C.

Clark Hill Reservoir, Manager, Clark Hill, S. C.
Mt. Carmel Camping Area southwest of Mt. Carmel, S. C.
Hawe Creek Camping Area southwest of McCormick, S. C.
Modoc Camping Area southwest of Modoc, S. C.

Private Family Campgrounds

Crystal Lake Family Campground	RFD, Chapin, S. C.
Lake Arrowhead Family Campground	P. O. Box 1865, Myrtle Beach, S. C.
Lake Murray Family Campground	Rt. 1, Gilbert, S. C.
Lakewood Family Campground	S. Hwy. 17, Myrtle Beach, S. C.
Pirate Cove Family Campsites and Trailer Park	Garden City, S. C.
Ponderosa Family Campground	Star Route 2, Myrtle Beach, S. C.
Sand Dollar Family Campground	P. O. Box 638, Isle of Palms, S. C.
Sherwood Forest Family Campground	P. O. Box 116, Windy Hill Beach, S. C.

FAMILY CAMPING AREAS IN SOUTH CAROLINA (continued)

State Parks

No advance reservations accepted.

\$1.50 per unit per day, except at 4 areas asterisked, where limited camping facilities are available for \$1.00 per unit per day.

Aiken	-	16 mi. east of Aiken, off SC 215 and US 78.
Barnwell	-	3 mi. southwest of Blackville on SC 3.
*Campbell Lake	-	10 mi. southwest of Cheraw off US 1 on county road.
Cheraw	-	4 mi. southwest of Cheraw on US 1 and US 52.
Chester	-	3 mi. southwest of Chester on SC 72.
Colleton Wayside	-	12 mi. north of Walterboro on US 15.
Givhans Ferry	-	15 mi. west of Summerville on SC 61.
Greenwood	-	17 mi. east of Greenwood on SC 702.
Hunting Island	-	16 mi. southeast of Beaufort on US 21.
Kings Mountain	-	12 mi. northwest of York on SC 161.
*Lee	-	6 mi. east of Bishopville on SC 156.
Little Pee Dee	-	12 mi. southeast of Dillon between SC 9 and SC 57
*Mill Creek	-	25 mi. southwest of Sumter off SC 261.
Oconee	-	8 mi. northwest of Walhalla on SC 107.
*Pleasant Ridge	-	22 mi. northwest of Greenville on SC 11.
Poinsett	-	18 mi. southwest of Sumter off SC 261.
Rivers Bridge	-	6 mi. southwest of Ehrhardt between SC 64 and SC 1
Sesquicentennial	-	13 mi. northeast of Columbia on US 1.
Table Rock	-	16 mi. north of Pickens via SC 288.

PERSONAL MENTION

B. D. Barnett, D. Hamm, D. E. Turk, J. F. Stephens and M. V. Aylott (Poultry Sci) presented papers at the August 2-9 convention of the Poultry Science Association in St. Paul, Minnesota.

D. A. King (Math) has resigned his position to accept employment at Mississippi Woman's College.

J. B. Thomas (L-P Lab) has been promoted from assistant director to associate director, effective July 15.

A. S. Tombes (Ento) read a paper at the July 8-16 International Entomological Congress in London, England.

J. F. Miles (Ag Econ) was chairman of a session at the July 27-28 National Broiler Council Symposium at Virginia Beach, Virginia.

D. R. Gentry (Tex Chem) was granted a fellowship to attend a seminar on Dynamic Textile Processes July 5-11 at M. I. T.

W. D. Trevillian (IM-TS) presented a program on fringe benefits to the Southern Industrial Relations Conference at Blue Ridge, N. C., July 15-18.

J. H. Rodgers (Ag Ed) was chairman of the adult education section of the Southern Regional Conference in agricultural education at Lubbock, Texas, July 28-31.

L. W. Riley (Ag Comm) has won the Farm Film Foundation's top annual award for his movie "One Ocean Away." The award includes a certificate, a silver bowl, and \$500 cash.

E. W. King (Ento) was a participant in the invitational Gordon Research Conference on Biomathematics at Andover, New Hampshire, July 12-17.

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 4 No. 1

September 1, 1964

REMINDER: SEPTEMBER DATES

<u>DATE</u>	<u>HOUR</u>	<u>PLACE</u>	<u>EVENT</u>
Sept. 7	8:30 a.m.	CE Auditorium	New faculty orientation
Sept. 7	7:00 p.m.	Clemson House	Dinner for new faculty
Sept. 8-9	----	Tillman Hall	New students matriculation
Sept. 9	10:30 a.m.	Chem. Auditorium	Faculty-staff meeting
Sept. 9	12:15 p.m.	Clemson House	Lunch for Honors freshmen
Sept. 9	8-10:00 p.m.	President's Home	Dr. & Mrs. Edwards at home
Sept. 10	8:30 a.m.	Tillman Hall	Freshman orientation
Sept. 10	1:30 p.m.	Tillman Hall	ROTC new student orientation
Sept. 11-12	8:00 a.m.	English-Math Complex	Registration-new students
Sept. 14	----	----	Classes begin: short schedule
Sept. 15	----	----	Classes: regular schedule

ENROLLMENT FOR THE SUMMER SESSIONS, 1962, 1963, 1964.

In the summer of 1962, Clemson University adopted a pattern of having two six-weeks summer sessions. This policy has enabled the University to make use of its facilities on a twelve-months basis, and since its adoption there has been a steady growth in the number of students attending the summer sessions.

The enrollment in the summer sessions for the past three years is as follows:

	First Session	Second Session	Total
1962	1386	914	2300
1963	1347	1007	2354
1964	1533	1202	2735

RECENT FACULTY AND STAFF ADDITIONS FOR SEPTEMBER

--in Agricultural Economics, Lonnie E. Talbert of Raleigh, North Carolina will be an Assistant Professor. He has the B.S. degree from Arkansas State College, the M.S. from Louisiana State University, and the Ph.D. from N. C. State where he was a NDEA Fellow. He has had two years teaching experience and is presently a resource economist with USDA. He is married to the former Lavern Talbert of Holland, Missouri and they have two children, ages 5 and 7.

--in Architecture, Frank Morris of Greenville, S. C. will be a part-time lecturer in Building Construction. A graduate of Staunton Military Academy and a student for a year at Washington and Lee University, he has been in the construction industry since 1922. He is currently president of the Morris Construction Company, with headquarters at Greenville. His wife is the former Mildred Jenkins of Raleigh, North Carolina.

--in Architecture, Clifton J. Marshall of Owensboro, Kentucky will be an Associate Professor. He has his degree in Architecture from the University of Illinois and has done graduate study at Wheaton College. He has had two years experience as a college teacher, seven years with architectural firms, and has been in private practice since 1957. He is married to the former Margaret Smith of Owensboro and they have a nine-year-old daughter.

--in English, Miss Marie Binsse of Norwalk, Connecticut will be an instructor. She has the B.A. from Marietta College and the M.S. from the University of Illinois. She has had one year of teaching experience on the college level.

--in Agricultural economics, Edward M. Corley will be an Assistant Professor. He has the B.S. from Colorado State, the M.S. from the University of Illinois, and the Ph.D. from Oklahoma State where he was a research assistant.

--in Agronomy, Michel W. Jutras will be an Assistant Professor. He has the B.S. from the University of Massachusetts, the M.S. from the University of Connecticut, and the Ph.D. from Iowa State. His academic experience includes three years at the University of Massachusetts as a member of the Dean of Men's staff; three years as a graduate assistant at Connecticut and Iowa State; and two years as an instructor at Iowa State. He is a member of Sigma Xi and other professional organizations and is married to the former Sandra Williams. They have one child.

--in the library, Miss Marian Hull Withington of Greenville, S. C. will be reference librarian in social sciences and humanities. She has the B.A. from the University of S. C. and the M.S. from Florida State. Her employment record includes several years as a U. S. State Department overseas secretary, two years as receptionist for the Greenville Museum of Art, and two years as reference librarian at Hollins College, Roanoke, Virginia. She is a member of Phi Beta Kappa and Beta Phi Mu.

--in Agricultural Extension, Fred A. Smith of Brownfield, Texas will be assistant county agent at Allendale. His B.S. is from Oklahoma State University where he has also done graduate study.

DR. SHELDON RETIRES

Dr. Dawson C. Sheldon, math faculty member at Clemson since 1929 and math department head since 1945, retired August 31. In addition to his experience at Clemson, Dr. Sheldon has had five years of teaching at the State College of Washington and the University of California. His B.S. degree is from the State College of Washington and his M.A. and Ph.D. from California.

At Clemson Dr. Sheldon has been responsible for building the Math department to its present size (twenty-eight teachers) and for initiating the department's Master of Applied Mathematics curriculum. Over the years he has served as member or chairman of practically every faculty standing committee. He has been master of the Masonic Lodge at Clemson, twice vice-president of the Fellowship Club, vice-chairman and chairman of the Clemson Presbyterian Board of Deacons, and a charter member of the S. C. Academy of Science. He is also a member of Phi Kappa Phi, Phi Eta Sigma, and the American Mathematical Association. His wife is the former Edith Grigsby Lowery and they have one daughter.

Dr. and Mrs. Sheldon plan to move to Cullowhee, North Carolina, where he will continue college teaching at Western Carolina College.

NOMINATIONS FOR HONORARY DEGREES DUE IN OCTOBER

The deadline for nominations of persons to receive honorary degrees at the June graduation is October 15.

Nominations may be made by any interested person. A narrative letter setting forth the accomplishments of the nominee should be submitted to any member of the Board of Trustees, the President of the University, or the President of the Senate. The person receiving the nomination will forward it to the Faculty Senate. The Seante will gather additional information from within and outside the University as deemed necessary.

A committee consisting of three members of the Board to be appointed annually by the President of the Board at the fall meeting, two members of the Academic Faculty Senate, the President of the Faculty Senate, and the President of the University will meet at the convenience of the committee to consider all nominations. The committee will forward its recommendations to the full Board of Trustees for final action.

It is the policy of the faculty and Board to limit the number of honorary degrees to a maximum for five during any one academic year.

FACULTY SENATE ROSTER, 1964-1965

<u>Agriculture</u>	<u>Address</u>	<u>Telephone</u>	<u>Term Expires</u>
Byrd, W. P.	207 P&AS	297	1965
Davis, L. H.	145 P&AS	294	1965
Shewfelt, A. L.	216 P&AS	257	1966
Boone, M. A.	134 P&AS	222	1967
Stepp, J. M.	101 Long Hall	338	1967

Architecture

Means, G. C.	113 Arch.	228	1965
Young, Joe	118 Arch.	228	1965
Gunnin, Emory	109 Arch.	228	1967
Hunter, R. H. (replaces Joe Young for 1965-66)			

Arts and Sciences

Flatt, J. L.	0-309 Classroom	387, 388	1965
Hill, L. E.	220 Hardin Hall	296	1965
Holt, A. H.	0-203 Classroom	383, 384	1965
McGee, C. M.	0-112 Classroom	383, 384	1965
Owings, M. A.	0-113 Classroom	383, 384	1965
Dinwiddie, J. G.	303 Brackett Hall	235	1966
Reed, C. A.	102 Physics	253	1966
Miller, J. E.	103 Physics	253	1966
Sullivan, J. R.	0-206 Classroom	387, 388	1966
Hill, Mrs. H. H., Sec.	102 Hardin Hall	296	1967
Henry, L. L.	0-325 Classroom	383, 384	1967
Brown, C. Q.	102 Geology Bldg.	291	1967
Felder, H. M.	0-204 Classroom	383, 384	1967

Engineering

Barlage, W. B.	128 Earle Hall	356	1965
Hudson, W. G.	220 Riggs Hall	229	1965
McHugh, C. M.	319 Riggs Hall	225	1965
Ball, W. L.	103 Riggs Hall	227	1966
Lewis, A. D.	29 Riggs Hall	229	1966
Lefort, H. G.	Olin Hall	304	1967
Long, J. T.	213 Riggs Hall	227	1967

Industrial Management and Textile Science

LaRoche, E. A.	308 Sirrine Hall	350	1965
Davis, C. C.	105 Sirrine Hall	332	1965
Campbell, T. A.	305 Sirrine Hall	350	1966
Porter, J. J.	11 Sirrine Hall	335	1967

TEACHING AND RESEARCH FACULTIES: SEPTEMBER, 1964

	PHD	MS	BS	TOTAL
Ag Econ	8	4		12
Ag Educ	3	2		5
Ag Engr	3	5		8
Agronomy	15	3		18
An Sci	5	2		7
Bot-Bact	14	2		16
Dairy Sci	7	2	1	10
Ento-Zoo	13	1	1	15
Food Sci-Biochem	6			6
Forestry	7	2		9
Hortic	8	3	2	13
Poultry	4			4
Agric	93 (76.2%)	26 (21.3%)	3 (2.5%)	122
Archit	9 (52.9%)	5 (29.4%)	3 (17.7%)	17
Chem-Geol	16	4	1	21
Engl-Mod Lang	13	26	1	40
Math	5	21	1	27
Physics	12	3		15
Soc Sci	14	17		31
Music	1	1		2
A&S	61 (44.9%)	72 (52.9%)	3 (2.2%)	136
Ceramic Engr	3	2	1	6
Chem Engr	7			7
CE	7	6	1	14
EE	4	8	1	13
EG		5	2	7
EM	3	3		6
Ind Engr	1	3		4
ME	3	5		8
Engr	28 (43.1%)	32 (49.2%)	5 (7.7%)	65
Ind. Educ	1 (25.0%)	2 (50.0%)	1 (25.0%)	4
IM	4	4		8
TS	2	15		17
IM-TS	6 (24.0%)	19 (76.0%)		25
University	198 (53.7%)	156 (42.3%)	15 (4.0%)	369

FACULTY ACADEMIC COMMITTEES, 1964-1965

Honors Program Council

C. B. Green, (ex officio), Chairman
C. W. Bolen (1965)
A. T. Hind (1965)
J. M. Stepp (1965)
A. R. Abernathy (1966)
H. N. Cooledge (1966)
C. V. Wray (1966)
G. F. Meenaghan (1967)
H. P. Ashworth (1967)
E. P. Stillwell (1967)
K. N. Vickery, (ex officio)

Admissions Committee

K. N. Vickery, (ex officio), Chairman
C. M. McGee (1965)
J. C. Hubbard (1965)
R. C. Harshman (1965)
C. M. Jones (1966)
R. W. Moorman (1966)
C. O. Caskey (1966) W. L. Ball, (1967)
E. Gunnin (1967) W. Capel, (1967)
R. J. Berry, (ex officio)

Library Committee

Everett Laitala (1965), Chairman
May Ringold (1965)
Robert Lambert (1965)
J. C. Fanning (1966)
J. M. Rush (1966)
C. A. Reed (1966)
M. A. Owings (1967)
V. Hodges (1967)
J. W. G. Gourlay, (ex officio)

Honors and Awards Committee

C. B. Green, Chairman
A. D. Lewis (1965)
J. J. Porter (1965)
H. E. Vogel (1965)
L. C. Johnson (1966)
J. V. Walters (1966)
G. C. Means (1967)
J. T. Lazar (1967)
J. C. McCormac (1967)
T. V. Wilson (1967)
F. M. McConnell (1966)
Susan Delony (ex officio)
A. M. Bloss, (ex officio)
G. E. Coakley, (ex officio)
K. N. Vickery, (ex officio)

Graduate Council

H. H. Macaulay, (ex officio), Chairman
H. G. Spencer (1965)
J. E. Halpin (1965)
F. C. Alley (1965)
Mark Steadman (1965)
W. P. Byrd (1966)
J. T. Long (1966)
C. H. Whitehurst (1966)
Academic Deans
V. Hurst (1967)
J. W. Kenelly (1967)
J. F. Andrews (1967)

Curriculum Committee

J. K. Williams, (ex officio), Chairman
M. A. Owings (1965)
J. W. Jones (1966)
Joe Young (1966)
Tom Campbell (1967)
A. D. Lewis (1967)
J. E. Miller (ex officio)
Registrar, (ex officio)
Academic Deans, (ex officio)

Schedule Committee

K. N. Vickery, (ex officio), Chairman
H. E. Brovles
J. H. Couch
C. C. Fain
E. A. Gunnin
R. C. Harshman
John LaGrone
Harold Landrith
Max Miller
Charles McGee
Carl McHugh
W. R. Mattox
R. F. Nowack
R. L. Perry
E. B. Rogers
J. R. Salley
I. A. Trively
J. V. Walters
J. B. Whitney
F. M. McConnell
C. C. Davis
D. R. Franklin

FACULTY ACADEMIC COMMITTEES, 1964-1965 (continued)

Ethics and Religion Committee

E. D. Stockman, Chairman
C. A. Arrington
P. H. Lewis
J. W. Arrington
C. E. Raynal
W. R. Kinnett
J. R. Cooper
W. T. Cox
J. K. Williams

University Lectures Committee

C. B. Green, Chairman, (ex officio)
John Acorn (1965)
L. E. Hill, (1965)
C. V. Wray, (1966)
J. N. Thurston, (1966)
J. W. Huffman (1967)
J. M. Stepp (1967)
J. K. Williams, (ex officio)

Patent Committee

M. A. Wilson, Chairman, (ex officio)
Hugh Wilson, (1965)
Carl McHugh, (1965)
F. J. Lindstrom, (1966)
K. N. Helton, (1966)
C. Bardsley, (1967)
Jack Mitchell, (1967)
Wright Bryan, (ex officio)
O. B. Garrison, (ex officio)
Stan Nicholas, (ex officio)
T. D. Efland, (ex officio)

Faculty Basic Research Committee

Hugh Macaulay, Chairman, (ex officio)
F. I. Brownley (1965)
H. H. Wilson (1965)
C. E. Littlejohn (1965)
C. V. McCain (1966)
John Miller (1966)
C. Gum (1967)
M. A. Boone (1967)
B. R. Skelton (1967)
M. A. Wilson, (ex officio)

Special Advisory Committee for Disposal
of Poisonous Chemicals

Hubert Webb, Chairman
Henry Polk
P. E. Robbins

Special Advisory Committee on Use of
Radioactive Materials

J. G. Dinwiddie, Chairman
K. Lehotsky
T. D. Efland
S. G. Nicholas

University Archives Committee

R. S. Lambert, Chairman (1966)
E. M. Lander, (1965)
Harriet Holman, (1967)
G. E. Metz, (ex officio)
J. W. G. Gourlay, (ex officio)

RESEARCH GRANTS

The following research grants have been received by the University since August 1:

--From the U. S. Army Medical Research and Development Command, \$38,869 to George F. Meenaghan (Chem. Engr.) for "Development of Design Criteria for Deep Facultative Stabilization Ponds."

--From the U. S. Department of Commerce, \$2500 to B. R. Skelton (Econ) for a study of "the American Textile Industry in Transition."

--From the Norwich Pharmacal Company, \$5800 to poultry science for a study of coccidia in chickens.

--From Deering Milliken, \$2645 to C. C. Fain (Cer. Engr) for research in electron microscopy techniques.

--From Chicago Pump Company, \$4,725 to A. R. Abernathy (CE) for research on "Thermophilic Aerobic Treatment of Waste."

UNIVERSITY EDITOR

Ray Davis has resigned his position as University Editor effective September 1 and Brent Breedin has been appointed to the position effective September 15. Mr. Davis has accepted an assignment as assistant director of development at Hanover (Ind.) College.

Mr. Breedin is a 1947 graduate of Washington and Lee University, a former staff member of the Anderson (S. C.) Independent and Daily Mail and was director of sports publicity at Clemson 1952 through 1955. He was resident manager of Hunt International Petroleum Company in Pakistan for three years, served two years as press and research assistant to Senator Strom Thurmond and was affiliated with the DuPont Company public relations office for three years. The Breedins' have three children: David (4), Sara (2) and Amelia (1).

PLANT MODEL GIVEN TO ENGINEERING

Union Carbide Corporation has donated a plastic model of a chemical plant to the College of Engineering to be used in the freshman course in Engineering Graphics. Models are used extensively in modern engineering design especially in designing complex plants. The Chemical Engineering Department was instrumental in obtaining the model which can now be seen in Room 221, Earle Hall and later on the third floor of Riggs Hall.

1965-1966 ACADEMIC CALENDAR

The University calendar for 1965-66 has been approved to implement the Faculty Senate suggestion that the first semester end prior to Christmas holidays, and is as follows:

Matriculation, new students	Friday	August 20
Matriculation, current students	Saturday	August 21
Registration, new students	Monday	August 23
Registration current students	Mon.-Tues	August 23-24
Classes begin, abbreviated class schedule	Wednesday	August 25
Thanksgiving holidays	Thurs.-Sat	Nov. 25-27
Examinations begin	Thursday	December 9
Mid-year graduation	Saturday	December 18
Matriculation, new students	Monday	January 10
Registration, all students	Wed.-Thurs.	January 12-13
Classes begin	Friday	January 14
Easter holidays at 1 p.m.	Thursday	April 7
Classes resume	Wednesday	April 13
Honors and Awards Day--classes suspended at 12 noon	Wednesday	April 20
Commencement	Saturday	May 14

The 1966 summer session will begin with matriculation and registration on May 30; and the second session of the summer school will end with graduation on August 13.

PERSONAL MENTION

--J. E. Halpin (bot.), W. M. Bowler and D. H. Petersen (Plant Path.), and Claud E. Thomas (grad. student, Bot.) presented papers at the August 23-26 meeting of the American Phytopathological Society in West Lafayette, Indiana.

--G. M. Armstrong (Bot.) presented a paper at the August 23-26 meeting of the American Phytopathological Society in Lafayette, Indiana.

PERSONAL MENTION (continued)

--The program for the National Meeting of The American Chemical Society in Chicago, August 30-September 4, lists papers authored by members of the staff of the Chemistry Department. Authors are J. C. Fanning, Larry T. Taylor (NASA Fellow), J. W. Huffman, N. P. Marullo, E. P. Hall (Graduate Student) and J. G. Dinwiddie, Jr.

--Wm. Chalupa (DySci.) presented a paper at the August 9-14 meeting of the American Society of Animal Science at Knoxville, Tennessee.

--W. L. Garvin (Arch) has resigned his Associate Professorship to become University architect at MIT.

--C. O. Caskey (Engl) presented a paper to a group of industrial and technical education teachers at a Communications Skills Instructors Conference in Raleigh, North Carolina, on July 25. His paper was entitled "Teaching English in Industry."

--H. L. Steele (Agric. Econ.) has accepted a position at Ohio State University effective September 1, 1964. His initial assignment with Ohio State will be with the Agricultural College, Sao Paula, Piracicaba, Brazil.

--J. Acorn (Arch) has won the Purchase Award at the Annual Piedmont Purchase Award Exhibition of Painting and Sculpture, Mint Museum, Charlotte, North Carolina, and represented in the Northeastern Regional Silvermine Show, Silvermine, Connecticut.

--R. Hunter (Arch) is represented in the juried Annual Piedmont Purchase Award Exhibition, Mint Museum, Charlotte, North Carolina. The work in the show represents artists from seven Southeastern states.

--Myrton A. Packer (Educ) has received his D.Ed. degree from Florida State University.

--A. H. Pitts and T. E. Hayden, Jr. (Ext.) have been granted leave for fiscal 1964-65 to do graduate study.

--Fred McLaughlin (Ext.) has resigned to accept other employment. W. T. Howell (Ext.) has resigned to enter law school at the University of S. C.

--J. L. Richardson (Tex) conducted a textile cost reduction seminar at Auburn University last month.

--P. W. Watkins (Agron) has resigned his assistant professorship to accept a position at the University of Tennessee.

--Academic tenure has been granted to the following: R. P. Ashworth (Bot); J. H. Rodgers (Ag Ed); U. S. Jones (Agron); Wesley Witcher (Bot); G. C. Kingsland (Bot); John W. Huffman (Chem); H. J. Wheeler (Econ); E. P. Stillwell, Jr. (Phys); and R. E. Borgman (Food Sci), Harriet R. Holman (Eng), Mark S. Steedman (Engl).

--J. P. Rostron (CE) is co-author with W. A. Shain (Forestry) of an article titled, "An Aerial Camera Pod to Reduce Photogrammetry Costs", which appeared in the May, 1964 issue of the Journal of Forestry.

--J. P. Rostron (CE) is author of a paper titled, "New Tests for Measuring the Elasticity of Micaceous Subgrades and Their Application to Flexible Pavement Design", which appeared in the Proceedings for the 22nd Annual Meeting of the Southeastern Association of the State Highway Officials.

CALENDAR OF ACADEMIC AND OTHER EVENTS -- 1964-1965

All Faculty Due on Campus	M	September 7
New Faculty and Staff Orientation	M-T	September 7,8
Dinner for New Faculty and Staff, Purple and Gold Room, Clemson House, 7:00 p.m.	M	September 7
Matriculation of New Students -- 1-4 p.m.	T	September 8
Matriculation of New Students -- 8 a.m. - 4 p.m.	W	September 9
General Faculty and Staff Meeting, Chemistry Auditorium, 10:30 a.m.	W	September 9
Luncheon for Honors Program Students, Clemson House, Purple and Gold Room, 12:15 p.m.	W	September 9
President and Mrs. Edwards "At Home" to Faculty, Staff and People of Community, 8-10 p.m.	W	September 9
New Student Orientation - Auditorium - 8:30 a.m.	Th	September 10
ROTC New Students Orientation - Auditorium 1:30p.m.	Th	September 10
Registration, New Students	F	September 11
Matriculation and Registration, Current Students	F-S	September 11,12
Freshman Picnic, 6:30 p.m. - Lawn of Classroom Building (In event of rain - Dining Hall)	S	September 12
Classes begin, abbreviated schedule	M	September 14
Classes, regular schedule	T	September 15
Rat Hop	F&S	September 18,19
Last Day for Matriculation	S	September 19

Football Game - <u>Furman at Clemson</u> (Band and Youth Day)	S	September 19
Football Game - N. C. State at Raleigh	S	September 26
<u>Freshman</u> Football Game - Wake Forest at Clemson	F	October 2
Football Game - Georgia Tech - Atlanta	S	October 3
Football Game - Georgia at Athens	S	October 10
Concert - Guy Lombardo and Anita Bryant - 8 p.m.	Th	October 15
<u>Freshman</u> Football Game - Duke at Clemson	F	October 16
Football Game - Wake Forest at Winston-Salem	S	October 17
Football Game - Texas Christian at Fort Worth	S	October 24
Concert - Swedish Chorus - 8:00 p.m.	M	October 26
Lectures - Dr. Ralph W. Pfouts 3 p.m. and 8:30 p.m.	Th	October 29
<u>Football Game - Virginia at Clemson</u> (Iptay Day)	S	October 31
Homecoming Dances	F&S	November 6,7
<u>Football Game - North Carolina</u> (Homecoming)	S	November 7
Lectures - Professor H. J. Oliver	M-W	November 9-11
Football Game - Maryland at College Park	S	November 14
 <u>Football Game - Carolina at Clemson</u> (Dads' Day)	S	November 21
Thanksgiving Holidays	Th-Su	November 26-29
Christmas Holidays - 1:00 p.m.	S	December 19
Classes Resume	M	January 4
Examinations begin	Th	January 14
Mid-Year Faculty Meeting	F	January 22
Mid-Year Graduation	S	January 23

Matriculation, New Students	M	January 25
Registration, All Students	W,Th	January 27,28
Classes begin, abbreviated schedule	F	January 29
Classes, regular schedule	S	January 30
Religious Emphasis Week	T,W,Th	February 2,3,4
Continuing Education Classes	T	February 16 - March 23
Concert - Richard Leibert, Organist Radio City Music Hall	M	February 22
Shakespearean Play by National Players	Th	February 25
Concert - Boston Pops Orchestra - 8:00 p.m.	W	March 10
Lecture - Dr. Louis B. Wright	M	March 29
Concert - Van Cliburn - 8:00 p.m.	Th	April 1
Easter Holidays - 1:00 p.m.	Th	April 15
Classes Resume	W	April 21
Board of Visitors	W,T,F,	April 28,29,30
Honors and Awards Day - Classes suspended at noon	W	May 5
Examinations begin	W	May 19
General Faculty and Staff Meeting, Chemistry Auditorium	F	May 28
Commencement Exercises	S	May 29

ADDITIONS TO THE UNIVERSITY STAFF -- JULY 1, 1964 - SEPT. 1, 1964

Alien, Joe Frank, Assistant Professor of Chemistry; A.B. Berry College; M.S. University of Mississippi; Ph.D. Georgia Institute of Technology; Baptist; Married; 20-A Hunter Street.

Antrim, John deCourcy, Assistant Professor of Civil Engineering; B.S.C.E. Lehigh University; M.S.C.E. and Ph.D. Purdue; Presbyterian; Married; 39-B Daniel Drive.

Bethel, Edward Lee, Associate Professor of Mathematics; B.A. Southern Methodist University; M.A. North Texas State University; Single.

Biggs, Samuel S., Captain, USAF; Air Science Department; A.B. East Carolina College; Presbyterian; Married.

Binsse, Marie Irene, Instructor in Speech & English; B.A. Marietta College; M.A. University of Illinois; Roman Catholic; Single.

Brown, Melvin C., Colonel, Deputy PMS; B.S. West Point; M.A. George Washington; Lutheran; Clemson House.

Carter, Robert M., Captain, USAF; Air Science Department; B.S. Clemson University; Presbyterian; Married; 118 Clarendon Drive.

Coker, Walter R., Captain; Military Science Department; B.S. Clemson University; Baptist; Married; 301 Skyview Drive.

Corley, Edward McCrory, Assistant Professor, Agricultural Economics; B.S. Colorado State University; M.S. University of Illinois; Ph.D. Oklahoma State University; Presbyterian; Married.

Davenport, John Douglas, Assistant Professor of Psychology; B.S. Clemson University; M.A. Furman; Episcopalian; Married; 117 James Street, Greenville, South Carolina.

Ford, Allan T., Major; Military Science Department; A.B. North Georgia College; Baptist; Married; College Heights Boulevard.

Ging, John L., Assistant Professor of Physics; B.A. Alfred University; M.S. Carnegie Institute of Technology; Ph.D. University of North Carolina; Married; 9-A Daniel Drive.

Griffin, Villard Stuart, Instructor in Geology; B.A. and M.S. University of Virginia; Methodist; Single.

Hancock, Clifton W., Staff Sergeant; Air Science Department; Married.

Hare, William Ray, Jr., Associate Professor of Mathematics; B.S. Henderson State Teachers College; M.S. and Ph.D. University of Florida; Church of Christ; Married.

Herlinger, William B., Associate Professor of Modern Languages; L.A.M. University Vienna; DKFM University of Berlin; Christian Scientist; Married; 12-B North Palmetto.

Hoey, Stanislaus J., Captain; Military Science Department; B.S. Mississippi Southern; Baptist; Married; 213 Wesley Drive.

Hulbert, Samuel F., Assistant Professor, Ceramic and Metallurgical Engineering; B.S., M.S. and Ph.D. Alfred University; 12-A North Palmetto Boulevard; Married.

Idol, John Lane, Jr., Assistant Professor of English; B.S. Appalachian State Teachers College; M.A. University of Arkansas; Protestant; Married; 30-A Martin Street.

Jennings, Carroll Wade, Assistant Professor of English; B.A. Texas Technological College; Methodist; Single.

Jutras, Michel Wilfrid, Assistant Professor, Agronomy; B.S. University of Massachusetts; M.S. University of Connecticut; Ph.D. Iowa State University; Roman Catholic; Married.

Klevgard, Paul Albert, Instructor in History; B.S. University of Wisconsin; M.A. Northwestern University; Methodist; Single.

Lukawecki, Stanley M., Associate Professor of Mathematics; B. S. Southeastern Louisiana College; M.S. and Ph.D. Auburn University; Episcopalian; Single; 29-B Martin Street.

McElroy, John Harmon, Visiting Instructor in English; A.B. Princeton University; M.A. Duke University; Methodist; Married; 105 Strawberry Lane.

Marshall, Clifton James, Associate Professor, Architecture; B.S. Arch. University of Illinois; Episcopalian; Married.

Meigs, Willard Lieben, Assistant Superintendent of Planning & Engineering; B.C.E. Cornell University; Protestant; Married; 108 Washington Avenue, Easley, South Carolina.

Morris, Frank P., Lecturer, Architecture; President of Morris Construction Company, Greenville; Episcopalian; Married.

Newell, Leonard J., Jr., Instructor in History; B.A. Ohio State University; M.A. Duke University; Mormon; Married; 9-E Daniel Drive.

Park, Sang Oh, Assistant Professor, Industrial Management; B.A. and M.A. Florida State University; Ph.D. University of North Carolina; Presbyterian; Married; 12-B North Palmetto.

Prochaska, Bobby Joseph, Instructor in Mathematics; B.S. University of Southwestern Louisiana; M.S. Colorado State University; Roman Catholic; Married; 16-B Hunter Street.

Roberts, Joel E., Captain; Military Science Department; A.B. Middlebury College; Protestant; Married; 36-A Daniel Drive.

Rothenberger, Ray Ralph, Assistant Horticulturist and Assistant Professor of Horticulture; B.S. Pennsylvania State; M.S. University of Missouri; Christian; Married; 7-D Daniel Drive.

Sack, Ronald Leslie, Assistant Professor of Civil Engineering; B.S., MSCE and Ph.D. University of Minnesota; Presbyterian; Married.

Shapiro, Stephen Leon, Instructor in Economics; B.A. University of Oklahoma; Jewish; Married; 3-C Palmetto Boulevard.

Shuler, Cyril O., Assistant Professor of Industrial Management; B.S. Clemson University; M.Litt. University of Pittsburgh; Methodist; Married; 104 Tamassee Drive.

Skardon, Beverly Norton, Instructor in English; B.S. Clemson University; M.A. University of Georgia; Episcopalian; Married; Woodland Way.

Talbert, Lonnie Eugene, Assistant Professor, Agricultural Economics; B.S. Arkansas State College; M.S. Louisiana State University; Ph.D. North Carolina State of the University of North Carolina at Raleigh; Baptist; Married

Taylor, Julia B., Extension Home Furnishings Specialist; B.S. Winthrop; M.S. University of Tennessee; Presbyterian; Widowed; 8-D Daniel Drive.

Toda, Fumio, Post Doctoral Research Fellow, Chemistry and Geology; B.S., M.S. and Ph.D. Faculty of Science, Osaka University; Married.

Vulkovic, Nicola, Instructor in Economics; B.A. University of Beograd, Yugoslavia and University of Geneva, Switzerland; M.A. McGill University; Serbian Orthodox Church; Married; C-C Daniel Drive.

Ware, James Hamilton, Jr., Assistant Professor of Philosophy and Religion; A.B. and M.A. Baylor University; B.D. Southern Baptist Theological Seminary; Baptist; Married; 104 Skyview Drive.

Willis, Samuel M., Associate Professor of Industrial Management; B.S. Clemson University; M.S. Georgia Institute of Technology; Ph.D. University of Alabama; Methodist; Married; Wren Street.

Withington, Marian Hull, Reference Librarian, Social Sciences and Humanities Division; B.A. University of South Carolina; M.S. Florida State; Episcopalian; Single.

Wright, Benjamin C., Major; Military Science Department; B.S. Clemson University; Baptist; Married; 201 Pleasant View Drive.

Yount, John Alonzo, Assistant Professor of English; B.A. Vanderbilt University; M.F.A. University of Iowa; Methodist; Married; 32-A Bradley Street.



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SOUTH CAROLINA ROOM
September 15, 1964

Vol. 4 No. 2

CALENDAR: September 16-October 3

Sept. 16-Oct. 3		Exhibit of Albricht Durer Prints, Lee Gallery, Architecture
Sept. 18	F	Freshman Dance, 10:00 p.m., Dining Hall
Sept. 19	S	Football: Clemson v. Furman, 2:00 p.m., here
Sept. 19	S	Freshman Dance, 9:00 p.m., Dining Hall
Sept. 22	T	Mr. George Asnip, President Woolen Worsted Group, Deering-Millikin, will speak on "What Does the Textile Industry Expect of a College Graduate?" 11:00 a.m., Sirrine Hall Auditorium.
Sept. 26	S	Foreign language examination for graduate students
Sept. 29	T	Mr. J. C. Spangler, Director of Employment, Dan River Mills, will speak on "Recruiting of College Students," Sirrine Hall Auditorium.
Oct. 2	F	Freshman Football: Clemson v. Wake Forest, 2:00 p.m., here
Oct. 3	S	Football: Clemson v. Georgia Tech, 2:00 p.m., in Atlanta

Note: Secretaries of the various campus faculty and staff organizations are requested to turn meeting dates in to the Dean of the University office for inclusion in the university calendar each month.

THE PUBLIC RELATIONS OFFICE

The Public Relations Office, directed by Joe Sherman (Ext. 344 & 345) is a service agency which depends heavily on the assistance and cooperation of faculty and staff.

The Public Relations Department provides press, radio and TV outlets with continuing coverage of academic, cultural, research and student activities. New staff members will be interested that Clemson's news bureau informational program was judged the nation's best in 1962 and 1963 by the American College Public Relations Association, and received the Southeastern District award for News Bureau Operations in 1963. You are urged to communicate with the public relations office when you have newsworthy (or feature-worthy) material. The office of University Editor is available to the entire staff of the university in the preparation of special publications, brochures, departmental folders, etc.

The Office of Public Relations is available for special work on special programs of institutional public relations. Again, it will interest newcomers that the campus color film production, "This is Clemson," available for booking through the Public Relations Office, was judged the national best by ACPRA.

INFORMATION ON VOTING IN SOUTH CAROLINA

Teachers in public-supported institutions, and their spouses, are required to be residents of the state for at least six months before they may vote in South Carolina in a national or state election. All other citizens must complete at least one year of residence before voting in such elections in South Carolina.

To qualify as a voter in county and municipal elections, all citizens must have been residents for six months in the county in which they reside, and for three months in the local precinct, or voting district.

Those who meet the requirements above may apply for Certificates of Registration according to the following schedules:

(a) In Pickens County: At L. C. Martin Drug Company, in Clemson, on September 24 and 25, from 11 a.m. to 7 p.m.

(b) In Oconee County: At the Clemson YMCA on September 23, from 9:30 a.m. to 4:30 p.m. The Oconee County Board of Registration also plans to be at Seneca one day and at Westminster one day during the week of September 21-25, but the dates have not yet been announced.

(c) In Anderson County: Only at the Court House in Anderson from 9 a.m. to 5 p.m. during the period from September 14-26.

MINUTES OF THE GRADUATE COUNCIL - AUGUST 20, 1964

1. The Graduate Council met in the Graduate School Office at 2 p.m. on Thursday, August 20.
2. The minutes of the May 27 meeting were approved and the Council recommended the awarding of one Ph.D. degree and 37 master's degrees at the summer graduation.

The Council received as information from the Department of Agronomy a report that it will broaden its offerings at the Ph.D. level to include crop science. The Department has previously confined its program to the area of soils.

Four programs at the master's degree level were considered by the Council and approved. These programs were planned by a Plant Science Committee in the College of Agriculture and Biological Sciences. The programs approved were:

Forestry
Microbiology

Nutrition
Plant Physiology

The Council considered at length the present language requirements for master's and doctor's degrees and several alternatives for meeting the language requirement. Discussion centered around the purpose of the language requirement, various methods of administering the examination, and the desirability of promoting uniformity among the different fields of study in the material to be translated. A motion not to use the language examination offered by the Educational Testing Service was passed. The Council approved a motion to continue the present language examination with instructions to the Graduate Dean to see that the quality of the examinations and the manner of administering them were improved.

The Council adjourned at 4 p.m.

GRADE-POINT RATIOS OF GRADUATES OF 1960, 1961, 1962, 1963 and 1964

Cumulative Grade-Point Ratios	Graduates of the Calendar Years Indicated				
	1960	1961	1962	1963	1964
4.00	0	0	0	0	0
3.80-3.99	3	6	3	5	6
3.60-3.79	6	5	8	6	9
3.40-3.59	14	14	16	14	16
3.20-3.39	12	12	12	22	19
3.00-3.19	22	22	27	24	30
2.80-2.99	28	31	22	18	34
2.60-2.79	38	42	36	40	55
2.40-2.59	57	50	68	55	86
2.20-2.39	77	68	90	98	83
2.00-2.19	82	106	108	127	130
1.80-1.99	125	164	186	225	120
1.60-1.79	16	0	0	0	0
1.40-1.59	3	0	0	0	0
1.20-1.39	1	0	0	0	0
TOTAL	484	520	576	634	588
MEDIAN	2.23	2.18	2.18	2.13	2.28
MEAN	2.34	2.31	2.29	2.27	2.41

A NOTE ON NEWSLETTER COPY

The Newsletter is edited and distributed by the public relations office on a bimonthly basis; however, material for the Newsletter should be submitted through administrative heads, not directly to the public relations office. Material should be in the hands of appropriate deans or directors by or before the 10th and 25th of each month.

TB TESTING PROGRAM

The Faculty Senate and the University Health Service are cooperating in a university-wide TB testing program. A mobile unit from the State Health Department is scheduled to visit the campus on September 21-22 and will be parked in front of the field house. On each day the unit will be in operation from 10 a.m. to noon and 1:30 p.m. to 4:30 p.m.

Personnel employed in the Divisions of the Office of the V.P. for Business and Financial Affairs, the Office of the V.P. for Development, and the Office of the Dean of Students are asked to come to the unit on Monday, September 21.

Faculty and non-academic personnel in Agriculture & Biological Sciences, Engineering, Arts & Sciences, Architecture, IM-TS, the Library, and the Office of the Dean of the University are asked to come to the unit on Tuesday, September 22.

There is no charge for this service and a 100 per cent turn is urged.

THE ALUMNI ASSOCIATION: A NOTE ON ITS WORK AND ACCOMPLISHMENTS

The following is offered as information for newcomers to Clemson and a reminder to others--

The Alumni Office plans and executes the continuing program of the Clemson Alumni Association. The 1964 national president of the Alumni Association is Harold Risher of Abbeville, South Carolina. The 1965 national president will be William Grier of Rock Hill, South Carolina.

The two-fold objective of the Alumni Association is to serve Clemson alumni and to serve Clemson University.

Service to the alumni is conducted through the continuing program of the Association and includes the official alumni records, the monthly Clemson Alumni News, the Alumni Placement Service, the annual Class Reunion Program, and programming for local alumni clubs.

Service to the University is rendered through the Clemson Alumni Loyalty Fund, an annual giving (living endowment) program dedicated to the continued strengthening of the institution's total academic program.

Since the reorganization of the Alumni Office in 1956, the Alumni Fund has accomplished the following:

Total Income.....	\$697,988
Expense of Service Program.....	<u>241,952</u>
To Aid Educational Programs.....	\$456,036

Educational Disbursements

Alumni Graduate Fellowships.....	\$ 49,600
Faculty Research and Development.....	48,856
R. F. Poole Alumni Scholarships.....	37,407
Alumni Professorships.....	12,000
Library.....	13,301
Restricted Gifts to Special Programs..	128,434
Institutional Permanent Endowment.....	96,531
Student Government.....	4,500
Clemson Foundation Loan Fund.....	20,000
Alumni Fund Reserve.....	<u>45,407</u>
	\$456,036

Recently the Clemson Alumni Association, along with the University of Colorado, received the Honorable Mention Award of the U. S. Steel Foundation's program to recognize improved alumni giving achievement.

Yours is the opportunity to help further the aims and objectives of the Clemson Alumni Loyalty Fund. Every Clemson alumnus is urged to contribute. Every faculty and staff member who is not an alumnus is urged to make an annual gift as an Associate Member. Gifts should be addressed to the Clemson Alumni Association.

CLEMSON UNIVERSITY: FINANCIAL RESOURCES AND BUDGET ESTIMATES, 1964-1965

The following are summaries of current operating budgets of the five major divisions and estimates of revenues earmarked by law for permanent improvements for the fiscal year beginning July 1, 1964, and ending June 30, 1965:

SUMMARY OF BUDGET ESTIMATES

A. FUNDS FOR CURRENT OPERATIONS

1. Educational and General:

(a) Teaching and Maintenance	\$ 6,204,816.00
(b) Auxiliary Enterprises	1,939,103.00
(c) Affiliated Activities	2,419,354.00
2. Agricultural Research	2,761,908.30
3. Agricultural Extension Service	3,403,216.34
4. Livestock-Poultry Health Department	384,368.00
5. Fertilizer Inspection and Analysis Department	99,002.00
Total	\$ 17,211,767.64

B. FUNDS FOR PERMANENT IMPROVEMENTS

(Revenues earmarked by law for payment on bond debt and notes)

1. Tuition and Matriculation Fees	\$ 923,197.00
2. Library Fees	106,400.00
3. Student Housing Fees	485,805.00
4. Faculty Housing Rental	142,549.00
5. Receipts from sale of water	51,700.00
6. Football Stadium Fees	23,000.00
Total	\$ 1,732,651.00

GRAND TOTAL ESTIMATED REVENUES AND EXPENDITURES...\$ 18,944,418.64

CLEMSON UNIVERSITY: SUMMARY OF ESTIMATED OPERATING FUNDS AVAILABLE
AND EXPENDITURES - FISCAL YEAR 1964-1965

1. (a) Teaching and Maintenance:

Estimated Available Funds

State Appropriations:

Teaching and Maintenance	\$4,353,440.00
Engineering Research	70,000.00
Teaching and Research in Water and Sewage	10,000.00
Federal Funds (Morrill-Nelson)	128,315.80
Endowment Funds	9,266.36
Sales Electric Current and Water	212,300.00
Maintenance and Activity Fees	961,200.00
Summer Term Fees	175,000.00
Other Miscellaneous Income	285,293.84
Total Estimated Income	\$5,204,816.00

Estimated Expenditures:

Salaries	\$4,342,071.00
Wages and Special Payments	510,503.00
Supplies, Expenses and Equipment	1,002,242.00
Coal and Electric Current	350,000.00
Total Estimated Expenditures	\$6,204,816.00

(b) Auxiliary Enterprises:

Estimated Receipts from Dining Hall,

Dormitories, Married Student

Housing, Hospital and Laundry	\$1,939,103.00
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Estimated Expenditures:

Salaries	\$ 154,188.00
Wages and Special Payments	481,046.00
Supplies, Expenses, and Equipment ...	1,303,869.00
Total Estimated Expenditures	\$1,939,103.00

(c) Affiliated Activities:

Estimated Receipts from Athletic

Contests, Book Store, Canteen,

University Housing, Y.M.C.A.

Fellowship Grants, Sponsored

Research, and fees allocated

to Student Organizations	\$2,419,354.00
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Estimated Expenditures:

Salaries	\$ 480,559.00
Wages and Special Payments	336,642.00
Supplies, Expenses, and Equipment	1,602,153.00
Total Estimated Expenditures	\$2,419,354.00

a/ Does not include tuition and matriculation fees. Such fees, by law, must be forwarded to State Treasurer to pay principal, interest, and form necessary reserve on State Institution Permanent Improvement Bonds. Also excludes fees allocated to student organizations.

2. Agricultural Research:

Estimated Available Funds:

State Appropriation	\$1,330,220.00
Sale of Farm Products	320,000.00
Federal Funds	874,580.00
Small Grants and Other Sources	237,108.00
Total Estimated Income	\$2,761,908.00

Estimated Expenditures:

Salaries	\$1,508,112.00
Wages	460,000.00
Special Payments	500.00
Supplies, Expenses, and Equipment	785,296.00
Permanent Improvements	8,000.00
Total Estimated Expenditures	\$2,761,908.00

3. Agricultural Extension Service:

Estimated Available Funds:

State Appropriation for Extension Work ...	\$1,306,822.00
State Appropriation for 4-H Club Camps ...	7,200.00
Federal Funds	1,906,652.00
County Funds	171,814.00
Other Funds	10,728.00
Total Estimated Expenditures	\$3,403,216.00

Estimated Expenditures:

Salaries	\$2,718,499.00
Wages	35,927.00
Supplies, Expenses and Equipment	641,590.00
Maintenance of 4-H Club Camps	7,200.00
Total Estimated Expenditures	\$3,403,216.00

4. Livestock-Poultry Health Department:

Estimated Available Funds:

State Appropriation	\$ 384,368.00
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Estimated Expenditures:

Salaries	\$ 214,860.00
Wages	10,400.00
Special Payments	40,913.00
Supplies, Expenses and Equipment	98,195.00
Indemnities	20,000.00
Total Estimated Expenditures	\$ 384,368.00

5. Fertilizer Inspection and Analysis Department:

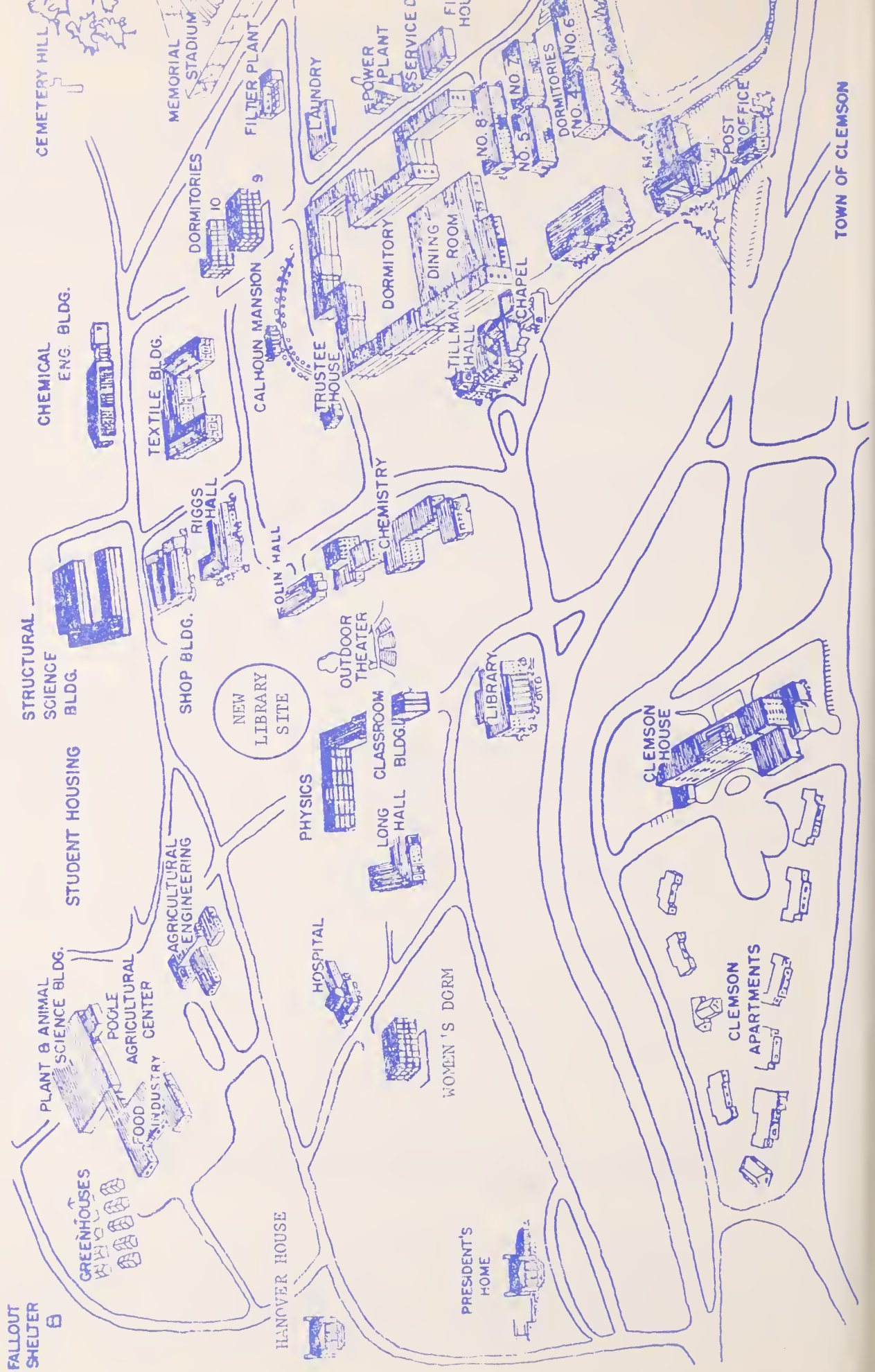
Estimated Available Funds:

State Appropriation	\$ 99,002.00
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Estimated Expenditures:

Salaries	\$ 62,868.00
Wages	15,756.00
Supplies, Expenses and Equipment	20,378.00
Total Estimated Expenditures	\$ 99,002.00

Clemson University



PERSONAL MENTION

Five additional members of the faculty or extension staff have been granted leave for graduate study. They are H. O. Vaigneur (Ag Engr), L. T. Fitch (EE), Joe H. Phillips (Ext), B. J. Skelton (Hort), and Robert Currin (Agron).

John L. Idol (Engl) has completed all requirements for his doctorate at the University of Arkansas.

Charles Arndt (Bot emeritus) has been honored in a special ceremony for charter members at the 40th anniversary meeting of the American Society of Plant Pathologists held at the University of Colorado, Boulder. Dr. Arndt is one of 11 remaining persons who helped establish the society.

J. T. Lazar (Dairy Science) is serving as technical reviewer and contributor in preparing the third edition of the Manual for Milk Plant Operators published by the Milk Industry Foundation. He has also been appointed to serve as faculty advisor of the National Student Branch of the American Dairy Science Association.

J. H. Ware (Soc Sci) has received his doctorate in philosophy from Duke University.

W. P. Byrd (Exp Stat) presented a discussion on "The Role of the Experiment Station Statistician in Reviewing Research Project Proposals" at the annual meeting of the Southern Experiment Station Statisticians held at The University of Kentucky, August 12-14.

O. B. Garrison was elected Chairman of the Southern Experiment Station Directors at their meeting in Birmingham, Ala., September 2-3.

Victor Hurst (Dy Sci) was a participant in the 5th International Invitational Congress on Animal Reproduction and Artificial Insemination in Trenton, Italy, September 6-13.

Gordon Gourlay (Library) has been appointed chairman of an inter-institutional library committee to promote closer working cooperation between libraries of the state-supported institutions of higher learning in South Carolina.

A. F. Newton (I Ed) has been appointed to the Public and Professional Relations Committee of the American Industrial Arts Association with the responsibility of representing nine southeastern states and the District of Columbia.

M. A. Boone (Poultry Sci) has been elected to fill Howard Steele's place on the Research Faculty Senate. His term will expire in June, 1965.

F. C. Alley (Chem Engr) has received a \$14,970 grant from the Public Health Service for a study of "Temperature Mechanism in Atmospheric Oxidant Process."

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C L E M S O N

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Newsletter

NOT FOR PUBLICATION

Vol. 4 No. 3

October 1, 1964

CALENDAR: October 1--October 17

- | | | |
|---------------|----|---|
| October 1 | Th | Women's Club, 3:30 p.m., Clemson House. |
| October 2 | F | Dr. R. D. McDonald, Kansas State University, Chemistry Seminar speaker. 4 p.m., Room 118, Brackett Hall |
| October 6 | T | Sage Club meeting. 6:30 p.m., Clemson House. J. K. Williams, speaker. |
| October 7 | W | Laicos Club, 8:15 p.m., Clemson House. |
| October 7 | W | Newcomers Club, 8:00 p.m., Clemson House. |
| October 8 | Th | Foreign Language Film Series: "The Confessions of Felix Krull"—German. 7 and 9 p.m., Civil Engineering Auditorium. |
| October 9 | F | Dr. Irvin M. Wofford, Southern Nitrogen Co., Inc., "Production and Use of Nitrogen Fertilizer Materials." 11:00 a.m., Room A203, P&AS Building. |
| October 11-17 | | Exhibit at Lee Gallery. Pier Luigi Nervi, "Space and Structural Integrity." |
| October 12 | M | Forum Club, 7 p.m., Chemistry Building Conference Room. |
| October 13 | T | Mr. John R. Thoman, Chief, Southeastern Water Laboratory, U. S. Public Health Service. 7 p.m., Civil Engineering Auditorium. |
| October 14 | W | Graduate Wives, 8 p.m., Clemson House. |
| October 15 | Th | Concert, 8 p.m., Field House. Guy Lombardo. |
| October 16 | F | Freshman Football: Clemson v. Duke. 3 p.m. |
| October 16 | F | Cross-Country Meet: Clemson, N.C. State, U.S.C. 1 p.m. |
| October 16 | F | Dixie Section, Institute of Food Technologists, will meet at the Clemson House. |
| October 18 | S | Afternoon concert at Y.M.C.A., 3:30 p.m. Program to be announced. |

NOTE: Secretaries of the various campus faculty and staff organizations are requested to turn meeting dates in to the Dean of the University office for inclusion in the University calendar each month.

MINUTES: THE FACULTY SENATE OF CLEMSON UNIVERSITY

The ninety-ninth meeting of the Clemson Faculty Senate was held at 4:00 p.m. on Tuesday, September 8, in Olin Hall, with President John E. Miller presiding.

A. L. Shewfelt, chairman of the Welfare Committee, reported that a mobile X-ray unit would be in Clemson September 21-22. A letter concerning this matter was sent to the faculty by the Faculty Senate. He also moved that the Senate approve the Welfare Committee's plan to have the faculty participate in the influenza immunization program. This motion was passed.

President Miller then appointed J. G. Dinwiddie, Jr., and J. T. Long to the Honorary Degree Committee.

The meeting was then adjourned with the announcement that the next meeting of the Faculty Senate is to be held on October 13, at 4 p.m. in Room 101 of the Physics Building.

MINUTES OF THE RESEARCH FACULTY COUNCIL

The Research Faculty Council met in Room F-150, P&AS Building, September 15, 1964, at 4 p.m.. Chairman C. E. Bardsley presiding.

The following persons were elected as officers for the 1964-65 fiscal year: P. E. Robbins (TC), Chairman; Wesley Witcher (Bot), Vice Chairman; and M. A. Boone (Poultry), Secretary.

The motion was made by J. B. Pitner and seconded that a vote of thanks be extended to C. E. Bardsley for the splendid job he did as chairman this past year.

Dr. Bardsley gave a brief account of the accomplishments of the council for the year 1963-64. He also stated that Dean J. K. Williams has increased his recognition of the research faculty council by assigning the Chairman to several committees.

Victor Hurst suggested that the research council might be able to help the administration through representation, by the chairman, on or with some of the following organizations: Educational Council; Alumni Seminar; Clemson Night Around the World; Graduate Council; New Staff Tour; Board of Visitors; Faculty Basic Research; Library Committee; and Liaison with Planning and Sponsored Research. It was suggested that the Chairman be relieved of some departmental duties to compensate for the extra time involved. It was also suggested that the Chairman should attend as many college functions (receptions, programs, lectures, etc.) to be seen and introduced as much as possible.

It was brought to the attention of the council, by A. C. Elrod, that there is some concern by at least one of the members of the Engineering staff as to the differentiation, on the campus, between research and routine testing. A proposal was offered and accepted that a representative of the College of Engineering present this problem to the council at the next meeting.

RESEARCH FACULTY COUNCIL ROSTER

The membership list of the Research Faculty Council for 1964-65 is:

College of Agriculture and Biological Sciences:

M. A. Boone, Secretary
R. L. Edwards
Victor Hurst
J. B. Pitner
A. L. Shewfelt
W. W. Witcher, Vice Chairman
W. C. Godley

College of Arts and Sciences:

F. J. Lindstrom
M. J. Skove

College of Engineering:

A. C. Elrod
A. E. Schwartz

School of Industrial Management and Textile Science:

E. S. Olson
P. E. Robbins, Chairman

GRADUATE LANGUAGE EXAMINATIONS--AN EXPLANATION

At its last meeting the Graduate Council discussed the foreign language examinations required of graduate students. The September 15 Newsletter reported that "The Council approved a motion to continue the present language examination with instructions to the Graduate Dean to see that the quality of the examinations and the manner of administering them were improved." The Council felt that the material being submitted to the Department of English and Modern Languages was not uniform in quality; some material was considered rather easy to translate; some was considered unusually difficult. The Council felt that the administrative procedure, which is the responsibility of the Graduate Dean, should be improved to achieve greater uniformity among departments. The Council did not express, nor intend for the minutes to express, dissatisfaction with the work of the Department of English and Modern Languages.

CLEMSON JOINS NATIONAL GRADUATE SCHOOL GROUP

Clemson's Graduate School has been admitted to membership in the Council of Graduate Schools in the United States. Presently 233 Graduate Schools hold membership in the organization.

CURRICULA AVAILABLE AT CLEMSON UNIVERSITY

UNDERGRADUATE		GRADUATE	
FIELD		FIELD	DEGREE
Agricultural economics		Agricultural economics	M.S., Ph.D.
Agricultural education		Agricultural education	M.Ag.Ed.
Agricultural engineering		Agricultural engineering	M.S.
Agronomy		Agronomy	M.S., Ph.D.
Animal science		Animal physiology	Ph.D.
Applied mathematics		Animal science	M.S.
Architecture*		Architecture	M.Arch.
Arts and sciences**		Bio-engineering	Ph.D.
Biology		Ceramic engineering	M.S.
Building construction*		Chemical engineering	M.S., Ph.D.
Ceramic engineering		Chemical physics	Ph.D.
Chemical engineering		Chemistry	M.S., Ph.D.
Chemistry		Civil engineering	M.S., Ph.D.
Civil engineering***		Dairy science	M.S.
Dairy science		Economics	M.A.
Electrical engineering		Electrical engineering	M.S.
Entomology		Engineering mechanics	M.S., Ph.D.
Food science		English	M.A., M.Ed.
Forestry		Entomology	M.S., Ph.D.
Horticulture		Forestry	M.S.
Industrial education		History (U.S.)	M.A., M.Ed.
Industrial engineering		Horticulture	M.S.
Industrial management		Industrial education	M.Ind.Ed.
Mechanical engineering		Industrial management	M.S.
Medical technology****		Materials engineering	Ph.D.
Metallurgical engineering		Mathematics	M.S., M.Ed.
Physics		Mechanical engineering	M.S., Ph.D.
Poultry science		Microbiology	M.S.
Pre-medicine and pre-dentistry		Nutrition	M.S., Ph.D.
Pre-pharmacy		Physics	M.S., Ph.D.
Pre-veterinary		Plant pathology	M.S., Ph.D.
Textile chemistry		Plant physiology	M.S.
Textiles		Poultry science	M.S.
		Textile chemistry	M.S.
		Water resources engineering	M.S., Ph.D.
		Zoology	M.S.

* Five-year curricula

** B.S. and B.A. degrees

*** Four and five-year curricula

**** Four-year degree in cooperation with Greenville General Hospital

FOREIGN LANGUAGE FILM SERIES

The Department of English and Modern Languages announces that the foreign film series for the first semester will consist of nine movies (with English subtitles) to be shown in the Civil Engineering Auditorium on certain Mondays and Thursdays at 7 and 9 p.m., beginning October 8.

Membership cards for the series are \$3 for faculty and staff and \$1 for students. These cards may be obtained at the door. .

The films to be shown are:

October 8	THE CONFESSIONS OF FELIX KRULL--German
October 19	LAZARILLO DE TORMES--Spanish
October 29	THE RED AND THE BLACK (color)--French
November 2	MY NAME IS IVAN--Russian
November 12	THE DEVIL STRIKES AT NIGHT--German
November 16	THE WOULD BE GENTLEMAN (color)--French
December 3	GHENGIS KAHN--Spanish
December 7	FAREWELL DOVES--Russian
January 7	THE MOUSE THAT ROARED (color)--English

PSYCHOLOGIST ADDED TO STUDENT AFFAIRS STAFF

Mr. John R. Anderson of Tazewell County, Virginia, and Tallahassee, Florida, will join the staff of the Dean of Student Affairs in November as a psychologist. He has a B.A. degree from Roanoke College, an M.S. from Virginia Polytechnic Institute, and has done residence work toward his doctorate at the University of Virginia. He is currently working with the Florida State Department of Education. Mr. Anderson is married and has two children.

PHI KAPPA PHI NOTICE FOR NEW FACULTY

Members of Phi Kappa Phi Honorary Society who are not active members of the Clemson University Chapter and who wish to participate are requested to contact F. C. Alley, Chemical Engineering Department, Ext. 357.

GRANTS AND GIFTS

(The following grants and gifts have been announced at Clemson since the publication of the September Newsletter.)

From Mr. Al Pavlik (1914 honorary), \$500 for use in the University Museum.

From a friend of Mr. Charles Daniel, \$1,000 to a student loan fund in memory of Mr. Daniel.

From the General Electric Company, \$2,500 to engineering for use in educational programs.

From the S. C. Water Pollution Control Authority, \$15,000 to A. R. Abernathy (CE) for "Development of Portable Stream Survey Instrumentation."

From the Department of Commerce, \$24,500 to Richard C. Harshman (Chem Engrg) for a study to determine the feasibility of chemical processing industries for Berkeley County.

From Lilliston Implement Company, \$2,400 to Ag Engineering for herbicide research.

From S. C. Automatic Merchandising Association, \$1,500 to Food Science and Biochemistry for microbiological studies on pre-cooked, packaged, mechanically vended food items.

From the Pillsbury Company to Food Science and Biochemistry to provide growing facilities, chickens, feed and necessary processing facilities for research involving dietary fats upon certain quality attributes of the chicken carcass. These facilities are estimated to cost \$1,500.

INFORMATION OF FULBRIGHT-HAYS INTERNATIONAL EDUCATIONAL EXCHANGE PROGRAM

The U. S. Office of Education (Bureau of International Education) has announced its program of 1965-66 academic year grants and 1965 summer grants for overseas teaching and seminars.

Under this program, instructors and assistant professors at the college level may apply to teach for a year in a foreign country. Some of the positions involve an exchange with a teacher from abroad, while others are one-way placements. Americans who teach foreign languages or social studies may also apply for summer seminars to be held overseas. Interested teachers should write before October 15 to obtain copies of the bulletin, Teacher Exchange Opportunities, 1965-66, and appropriate application forms. Their requests should be addressed to:

Teacher Exchange Section
Bureau of International Education
U. S. Office of Education
Washington, D. C. 20202

GUS METZ RESIGNS; WOOD RIGSBY APPOINTED

By means of letters to President Edwards and the Board of Trustees of Clemson University, Mr. Gustave E. Metz has resigned his position as Assistant to the President and Secretary to the Board of Trustees, effective October 15.

President Edwards has announced the appointment of Major General Allen Wood Rigsby to the position of Assistant to the President, Secretary to the Board of Trustees, and University Counsel.

Mr. Metz graduated from Clemson in 1927 and has been a member of the University staff since 1929. He joined the University as assistant registrar and instructor in math in 1929 and became acting registrar in 1934-35. He served as registrar from 1935 until 1955 when he was appointed Assistant to the President and Secretary to the Board of Trustees.

General Rigsby retired from the U. S. Air Force as Judge Advocate of the Air Force Logistics Command on June 30, 1963, and joined the University staff as director of planning and sponsored research on July 1, 1963.

As University Counsel, General Rigsby will be constantly available for legal advice and for coordinating legal questions with the Board of Trustees and with the firm of Watkins, Vandiver, Kirven and Long (attorneys for the University).

BLUE CROSS OPENS ANNUAL RE-ENROLLMENT PERIOD

Representatives of Blue Cross-Blue Shield Insurance will be on campus September 25 through October 25. This is the annual re-enrollment period for group insurance available to all faculty members and other regular employees of Clemson University.

During this re-enrollment period any member of the Blue Cross-Blue Shield program may make changes (additions, deletions, etc.) if desired, to fit their individual and/or family needs. Initial applications will also be accepted during this period for those who desire insurance coverage through this plan.

New employees may apply for insurance any time during their first 31 days of employment. Other employees may apply for insurance or request changes in present coverage only during the annual re-enrollment period, September 25--October 25. Employees presently enrolled and desiring no changes will be automatically continued and need not contact the representatives at this time.

Appointments may be made with the representatives by telephoning Mr. W. J. Stamey in the Personnel Office, Extension 365.

PERSONAL MENTION

Calvin B. Reeves (Dy Sci) has had his leave extended for an additional year. He is doing graduate study at Ohio State University.

G. C. Robinson (Cer Engrg) presented a paper at the September 23-26 meeting of the S.W. section of the American Ceramic Society in Dallas, Texas.

R. C. McDaniel (Ext) has been granted leave to do graduate study at the University of Tennessee.

B. W. Bierer (Poultry Sci & L-P Lab) received on September 16 a Distinguished Service Award bronze plaque for his outstanding contribution to the turkey industry in the Southeast.

Harlan McClure (Arch) served this month as advisor to the Charleston City Council and Mayor for a competition to erect a new municipal auditorium and exhibition hall.



C L E M S O N

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

Newsletter

NOT FOR PUBLICATION

Vol. 4 No. 4

October 15, 1964

CALENDAR: October 16--November 3

- | | | |
|------------|---|---|
| October 16 | F | Freshman Football: Clemson v. Duke. 3 p.m. |
| October 16 | F | Cross-Country Meet: Clemson, N.C.State, U.S.C. 1 p.m. |
| October 16 | F | Dixie Section, Institute of Food Technologists, will meet at the Clemson House. Open meeting from 2-4 p.m. |
| October 19 | M | Mr. Jon W. Hooks (Eli Lilly & Co.) will speak on "Fertilizer, Herbicide Solutions for Crop Production." 11 a.m., Room A203 P&AS Building. |
| October 20 | T | Dr. Raymond Seeger (NSF) will speak on "The Importance of Teaching History of Science in Training Research Scientists." 4 p.m., Room 101, Physics Dept. |
| October 20 | T | Mr. W. J. Martin (Cotton Utilization Specialist, USDA) will speak on "The Extension of the Cotton Utilization Program." 11 a.m., Sirrine Hall Auditorium. |
| October 20 | T | Regular meeting, Research Faculty Council, 28 Tillman Hall, 4 p.m. |
| October 20 | T | Dr. Raymond Seeger will speak at 8 p.m., Earle Hall Auditorium, on "Galileo's Philosophy of Science--in Retrospect." |
| October 20 | T | Dr. J. H. Ware (Soc. Sci.) will lecture on "Philosophical Research." Room 100, Earle Hall, 4 p.m. |
| October 20 | T | Fellowship Club, 6:30 p.m., Clemson House. |
| October 21 | W | Laicos Club, 8:15 p.m., Clemson House. |
| October 21 | W | Newcomers Club, 8 p.m., Clemson House. |
| October 26 | M | Concert Series. Swedish Chorus. Field House, 8 p.m. |
| October 26 | M | Forum Club, 7 p.m., 205 Chemistry Building. R. S. Lambert (History) will read a paper. |
| October 27 | T | Mr. M. Earl Heard, Jr. (V.P., Saco Lowell Shops), will lecture on "The European Textile Market and International Sales." 11 a.m., Sirrine Auditorium. |
| October 27 | T | Mr. Buford Pickens, AIA (Historian and Educator, Washington University, St. Louis, Mo.), will lecture at 8 p.m., Architectural Auditorium. |

October 28	W	Graduate Wives, 8 p.m., Clemson House.
October 28	W	Mr. Ulrich Franzen, AIA (Distinguished Practicing Architect, N.Y.C.) will lecture on "Excellence in Urban Design." 8 p.m., Architectural Auditorium.
October 29	Th	Winthrop Daughters will meet at 8 p.m. at the home of Mrs. F. C. Anderson, Sr., Seneca Road, with Miss Beth Anderson and Miss Frances McAlister as co-hostesses.
October 29	Th	Air University Aerospace Presentation. 4 p.m. University Auditorium given by team from the Air University, Maxwell Air Force Base.
October 29	Th	Dr. A. A. Benedetti-Pichler (Editor, Mikrochimica Acta) will lecture in the Chemistry Seminar Program. 4 p.m., Room 118, Brackett Hall.
October 29	Th	Dr. R. W. Pfouts, Chairman of the Department and Professor of Economics, University of North Carolina, will speak on "What Is an Affluent Society?" 8 p.m., Chemistry Auditorium. Presented by the Department of Industrial Management and the Faculty of Economics
October 30	F	Mr. Fred L. McNatt (Allied Chemical) will lecture on "Shipping, Storing, and Handling Multinutrient (Mixed) Solutions for Plant Growth." 11 a.m., Room A203, P&AS Building.
October 30	F	Dr. R. A. Young (Head, S. S. Div., Engr. Exp. Station, Ga. Tech) will lecture on "a-Base Phase Transition in Quartz." 3 p.m., 101 Physics Building.
October 31	S	Football: Clemson v. Virginia. 2 p.m., Death Valley.
Nov. 3-11		Exhibit: "Interaction of Color." Lee Gallery, Architecture.
November 3	T	Sage Club. 6:30 p.m., Clemson House.
November 3	T	Mr. J. R. Garnett (I.B.M.) will lecture on "The Application of Electronic Computers to the Textile Industry." 11 a.m., Sirrine Auditorium.

NOTE: Secretaries of the various campus faculty and staff organizations are requested to turn meeting dates in to the Dean of the University office for inclusion in the University calendar each month.

ENROLLMENT TRENDS AT CLEMSON

TABLE I - FIRST SEMESTER UNDERGRADUATE ENROLLMENT BY COLLEGES OR SCHOOLS

College or School	1957-1958	1958-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965
Agriculture and Biological Sciences	484	515	582	600	620	565	555	584
Architecture*		154	179	201	233	269	276	289
Arts and Sciences**	765	896	1003	1183	1224	775	926	1095
Engineering	1770	1741	1670	1598	1531	1532	1534	1494
Industrial Management and Textile Science**	301	271	266	300	303	893	786	754
TOTAL	3320	3577	3700	3882	3911	4034	4077	4216

TABLE II - PER CENT OF UNDERGRADUATE STUDENT ENROLLMENT BY COLLEGES OR SCHOOLS

College or School	1957-1958	1958-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965
Agriculture and Biological Sciences	14.6	14.4	15.7	15.4	15.9	14.0	13.6	13.9
Architecture*		4.3	4.9	5.2	6.0	6.7	6.8	6.8
Arts and Sciences**	23.0	25.0	27.1	30.5	31.3	19.2	22.7	26.0
Engineering	53.3	48.7	45.1	41.2	39.1	38.0	37.6	35.4
Industrial Management and Textile Science**	9.1	7.6	7.2	7.7	7.7	22.1	19.3	17.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Included under Engineering through 1957-1958.

**Industrial Management included under Arts and Sciences through 1961-1962.

TABLE III - FIRST SEMESTER ENROLLMENT OF FIRST-SEMESTER FRESHMEN BY COLLEGES OR SCHOOLS

College or School	1957-1958	1958-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965
Agriculture and Biological Sciences	134	156	179	167	168	152	147	153
Architecture*		43	67	85	106	106	89	85
Arts and Sciences**	203	247	271	347	349	224	273	370
Engineering	602	623	617	633	551	551	550	560
Industrial Management and Textile Science**	94	72	56	79	74	201	167	161
TOTAL	1033	1141	1190	1311	1248	1234	1226	1329

TABLE IV - PER CENT OF FIRST-SEMESTER FRESHMAN ENROLLMENT BY COLLEGES OR SCHOOLS

College or School	1957-1958	1958-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965
Agriculture and Biological Sciences	13.0	13.7	15.0	12.7	13.5	12.3	12.0	11.5
Architecture*		3.8	5.6	6.5	8.5	8.6	7.2	6.4
Arts and Sciences**	19.6	21.6	22.8	26.5	28.0	18.2	22.3	27.9
Engineering	58.3	54.6	51.9	48.3	44.1	44.6	44.9	42.1
Industrial Management and Textile Science**	9.1	6.3	4.7	6.0	5.9	16.3	13.6	12.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Included under Engineering through 1957-1958.

**Industrial Management included under Arts and Sciences through 1961-1962.

ENROLLMENT BY MAJOR COURSES AND STUDENT CLASSIFICATION, FIRST SEMESTER 1964-1965

r Course	Freshman (Semester)		Sophomore (Semester)		Junior (Semester)		Senior (Semester)		Total		
	1st	2nd	1st	2nd	1st	2nd	1st	2nd			
culture	4	2	0	0	0	0	0	0	6		
cultural Economics	6	9	4	5	4	2	5	1	36		
cultural Education	10	19	4	11	5	6	13	10	78		
cultural Engineering	11	2	4	2	5	1	5	1	31		
onomy	5	4	2	5	2	3	9	2	32		
al Science	9	10	6	5	1	7	4	2	44		
ogy	18	13	9	9	7	6	15	5	82		
y Science	1	4	1	3	2	4	7	1	23		
nology	1	0	1	1	1	0	0	0	4		
o Science	1	2	0	1	4	0	1	0	9		
stry	38	18	9	7	8	12	13	3	108		
iculture	12	9	3	7	5	7	12	1	56		
try Science	0	1	0	0	4	1	1	1	8		
eterinary	37	10	14	4	2	0	0	0	67		
o-Total	153	103	57	60	50	49	85	27	584		
itecture	78	28	36	17	14	17	52*	8**	250		
ing Construction	7	9	8	3	4	3	5	0	39		
o-Total	85	37	44	20	18	20	57	8	289		
ed Mathematics	39	7	17	9	12	4	11	1	100		
and Sciences	153	93	88	69	62	37	72	21	595		
ustry	32	2	8	9	8	5	4	3	71		
ation	0	0	0	0	0	1	1	0	2		
al Technology	8	3	1	2	1	1	0	0	16		
ics	24	6	13	1	7	4	4	1	60		
edicine	111	28	47	15	26	5	13	2	247		
harmacy	3	0	1	0	0	0	0	0	4		
o-Total	370	139	175	105	116	57	105	28	1095		
ngineering	34	1	0	0	0	0	0	0	35		
ic Engineering	20	6	11	3	14	2	11	3	70		
ical Engineering	82	13	33	7	27	8	25	0	195		
Engineering	114	33	32	26	27	15	37	17	301		
erical Engineering	149	42	63	32	43	17	62	16	424		
trial Education	3	3	1	4	3	6	6	2	28		
trial Engineering	22	13	9	7	11	2	8	2	74		
anical Engineering	131	50	46	23	28	28	39	11	356		
alurgical Engineering	5	3	0	0	3	0	0	0	11		
o-Total	560	164	195	102	156	78	188	51	1494		
trial Management	121	78	50	65	42	45	75	44	520		
ile Chemistry	15	2	11	2	5	3	9	5	52		
ile Management	21	30	15	18	13	11	36	19	163		
ile Science	4	0	2	1	4	4	4	0	19		
o-Total	161	110	78	86	64	63	124	68	754		
cal	1329	553	549	373	404	267	559	182	4216***		
					Part-Time		Full-Time				
ates						109		206		315	
traduates						34		9		43	
lesified						12		2		14	
cal						155		217		372	
nd Total											4588

*Includes nineteen who are in the first semester of the fifth year.

**Includes four who are in the second semester of the fifth year.

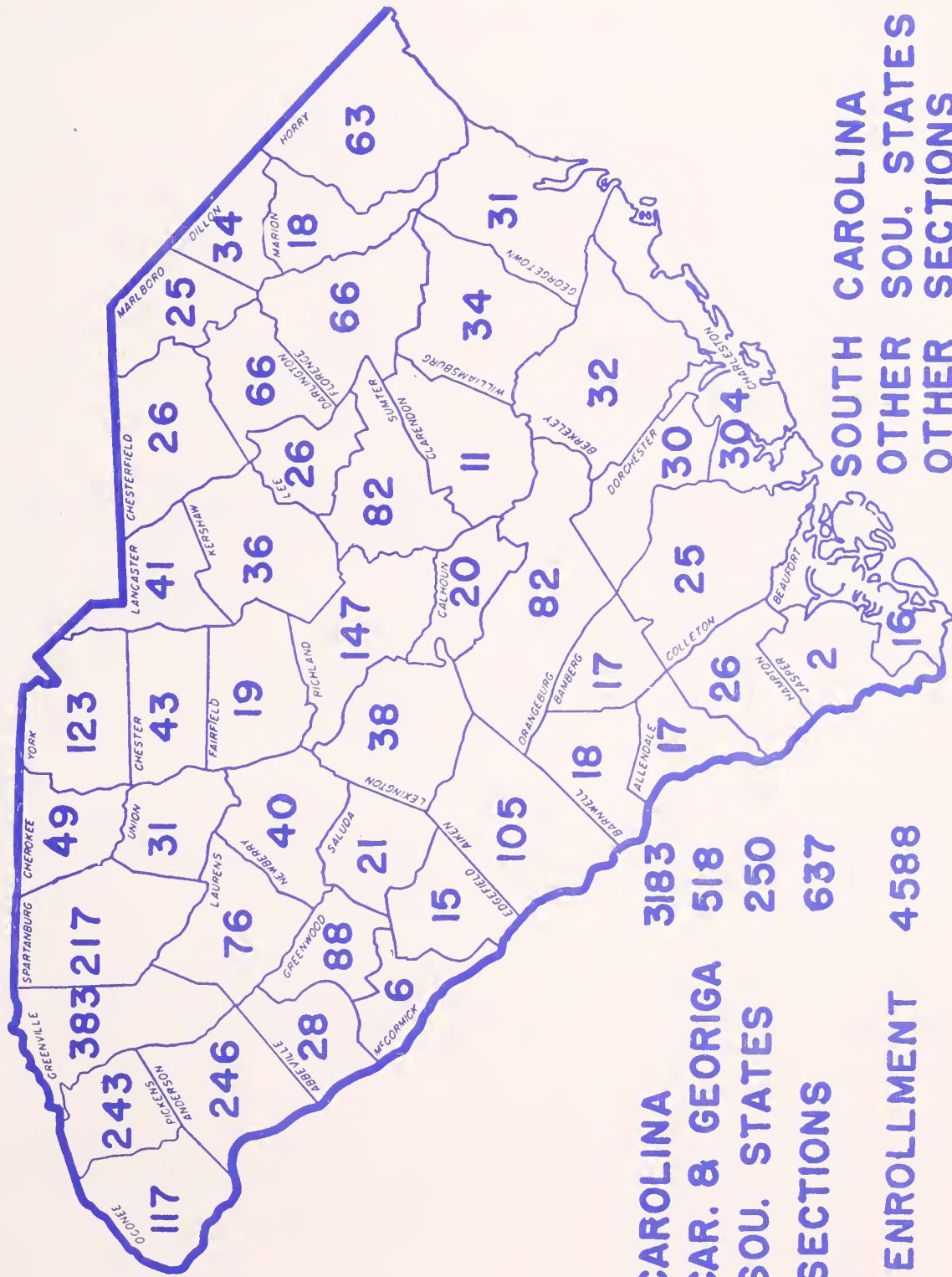
***Includes fifty-five part-time undergraduate students.

ENROLLMENT BY MEN AND WOMEN - FULL-TIME AND PART-TIME, FIRST SEMESTER 1964-1965

Classification	Men			Women			Total		
	Full Time	Part Time	Total	Full Time	Part Time	Total	Full Time	Part Time	Total
1st Sem. Freshman	1249	1	1250	76	3	79	1325	4	1329
2nd Sem. Freshman	535	4	539	13	1	14	548	5	553
Sub-Total	1784	5	1789	89	4	93	1873	9	1882
1st Sem. Sophomore	514	1	515	30	4	34	544	5	549
2nd Sem. Sophomore	349	5	354	16	3	19	365	8	373
Sub-Total	863	6	869	46	7	53	909	13	922
1st Sem. Junior	393	4	397	6	1	7	399	5	404
2nd Sem. Junior	260	5	265	2	0	2	262	5	267
Sub-Total	653	9	662	8	1	9	661	10	671
1st Sem. Senior	516	9	525	15	0	15	531	9	540
2nd Sem. Senior	164	11	175	3	0	3	167	11	178
Sub-Total	680	20	700	18	0	18	698	20	718
1st Sem. Fifth Year	19	0	19	0	0	0	19	0	19
2nd Sem. Fifth Year	1	3	4	0	0	0	1	3	4
Sub-Total	20	3	23	0	0	0	20	3	23
Total	4000	43	4043	161	12	173	4161	55	4216
Graduates	185	100	285	21	9	30	206	109	315
Postgraduates	9	30	39	0	4	4	9	34	43
Unclassified	0	2	2	2	10	12	2	12	14
Total	194	132	326	23	23	46	217	155	372
Grand Total	4194	175	4369	184	35	219	4378	210	4588

WHERE THE CLEMSON STUDENTS COME FROM

FIRST SEMESTER 1964 - 1965



SOUTH CAROLINA 3183
 NORTH CAR. & GEORIGIA 518
 OTHER SOU. STATES 250
 OTHER SECTIONS 637
 TOTAL ENROLLMENT 4588

SOUTH CAROLINA 69.4%
 OTHER SOU. STATES 16.7%
 OTHER SECTIONS 13.9%

A FELLOWSHIP REMINDER

The Graduate School has recently been notified of the following grants for further study and research. A file with complete information about each grant is available in the Graduate School office.

- A. Woodrow Wilson Fellowship Nominations. To attract men and women to the profession of college teaching, the Woodrow Wilson Foundation annually awards fellowships to 1,000 prospective first-year graduate students. Candidates must be nominated by a faculty member before October 31, 1964. They cannot apply directly themselves.

The Foundation primarily supports candidates in the humanities and social sciences. Science and mathematics majors with a clear interest in a teaching career may be nominated, but, if U. S. citizens, must apply simultaneously for a National Science Foundation Fellowship and must accept that award if offered.

Any Clemson University faculty member interested in nominating a Clemson student for a Woodrow Wilson should consult Dr. C. B. Green, who is the campus representative for the Foundation.

- B. Danforth Graduate Fellowships. The University is permitted to nominate five students who have high academic standing, are interested in college teaching, and are interested in the questions with which religious expressions attempt to deal. Nominations deadline is October 26. The campus representative is Dean Hugh Macaulay.
- C. Social Science Research Council has a number of fellowships and grants available under seven different programs. Further information is available in the Graduate School office.
- D. East-West Center Graduate Fellowships tenable at the University of Hawaii provide for 21 months of study in subjects relating to the Asian area. The stipend is \$8500. Applications must be submitted before December 15.
- E. Atomic Energy Fellowships in Health Physics and in Nuclear Science and Engineering carry stipends of \$2400 plus tuition, fees, and allowances. Applications must be submitted by January 15. Further information may be obtained from Oak Ridge Institute of Nuclear Studies, Oak Ridge, Tennessee.

Additional fellowships were listed in the Newsletter of July 1, 1964.

EXTENSION MARKETING WORK LEADER DIES

J. E. Youngblood, Leader, Extension Marketing Work and Director of the South Carolina Agricultural Marketing Commission, died in a Columbia hospital on October 1, after a short illness.

Mr. Youngblood was born at Elko, S. C., on November 17, 1905. He was graduated from Clemson College in 1927. After several years in Federal-State Shipping Point Inspection work he was appointed assistant county agent, Charleston County, on January 10, 1935. In 1939 he became county agent, Beaufort County, and in 1941, was transferred to Columbia as Extension Marketing Specialist. He resigned in 1948 to take the position of director of the S. C. Agricultural Marketing Commission. In 1952, after the death of T. A. Cole, Chief of Extension Marketing Work, Mr. Youngblood was appointed as leader of extension marketing work and director of the South Carolina Agricultural Marketing Commission, which position he held until his death on October 1.

RESEARCH SEMINARS

To make graduate students in engineering more aware of general research endeavors, the Department of Chemical Engineering recently announced a series of seminars with the general title, "Research in the University." Two seminars have been held, led by Victor Hurst and J. W. Kenelly. All faculty, staff, and graduate students in the University are cordially invited to attend the remainder of these seminars. The time is 4:00 P.M. and the place is Room 100 Earle Hall.

<u>Date</u>	<u>Speaker</u>	<u>Field</u>
October 20, 1964	J. H. Ware	Philosophy
October 27, 1964	E. P. Stillwell	Physics
November 3, 1964	R. J. Calhoun	Language
November 10, 1964	K. R. Craig	Architecture
November 17, 1964	J. G. Dinwiddie	Organic Chemistry
November 24, 1964	E. M. Lander	History
December 1, 1964*	R. H. Hunter	Art
December 15, 1964	H. G. Spencer	Physical Chemistry

*Attendance limited to 35 in Mr. Hunter's studio.

BLUE CROSS CONTINUES ANNUAL RE-ENROLLMENT PERIOD

Representatives of Blue Cross-Blue Shield Insurance will be on campus through October 25. This is the annual re-enrollment period for group insurance available to all faculty members and other regular employees of Clemson University.

During this re-enrollment period any member of the Blue Cross-Blue Shield program may make changes (additions, deletions, etc.) if desired, to fit their individual and/or family needs. Initial applications will also be accepted during this period for those who desire insurance coverage through this plan.

New employees may apply for insurance any time during their first 31 days of employment. Other employees may apply for insurance or request changes in present coverage only during the annual re-enrollment period. Employees presently enrolled and desiring no changes will be automatically continued and need not contact the representatives at this time.

Appointments may be made with the representatives by telephoning Mr. W. J. Stamey in the Personnel Office, Extension 365.

FOREIGN LANGUAGE FILM SERIES

The Department of English and Modern Languages repeats its announcement that the foreign film series for the first semester is underway. Each movie (with English subtitles) will be shown in the Civil Engineering Auditorium, at 7 and 9 p.m.

Membership cards for the series are \$3.00 for faculty and staff and \$1 for students. These cards may be obtained at the door.

The films still to be shown are:

October 19	Lazarillo De Tormes--Spanish
October 29	The Red and the Black (color)--French
November 2	My Name is Ivan--Russian
November 12	The Devil Strikes at Night--German
November 16	The Would Be Gentleman (color)--French
December 3	Ghengis Kahn--Spanish
December 7	Farewell Doves--Russian
January 7	The Mouse that Roared (color)--English

CLEMSON AREA CONTINUING EDUCATION CENTER: PROGRAM NOTICE

A variety of new courses will be offered in the 1965 series of classes to be conducted this winter by the Clemson Area Continuing Education Center.

The program consists of 46 courses with classes to be held the six consecutive Tuesday nights of February 16 and 23, and March 2, 9, 16 and 23, 1965, on the Clemson campus. The Center program of classes is complete and a brochure giving full details will be printed and distributed beginning January 1.

Among the new courses are: Russian civilization and the Soviet Union; value engineering; computers in our lives; modern mathematics for parents; current books; water color; enameling on copper-making jewelry and art objects; general wood-working for beginners; and Norwegian embroidery.

All the courses will be grouped under the general headings of history and world affairs; philosophy and psychology; science and business; English and foreign languages; home and garden, the homemaker and her arts; arts, crafts and hobbies; and recreation.

A. M. Musser continues as chairman of the 1965 steering committee and Mrs. John T. Bregger is again program chairman and director of the Center.

FACULTY ADDITION IN CHEMICAL ENGINEERING

Joseph Chester Mullins of Smyrna, Georgia, will join the Chemical Engineering Department in January as an assistant professor. He did undergraduate work at Emory University and Georgia Tech and expects his doctorate from Georgia Tech in June, 1965. He has worked for Tennessee Products Chemical Corporation, has been an instructor at Georgia Tech, and is currently employed by the Tech engineering experiment station. He is a member of Sigma Xi and a past president of Theta Xi. Since 1961 he has been co-author of seven published research papers.

Mr. Mullins is married and has two children.

PERSONAL MENTION

L. G. Rich (Engr Adm) presented a paper at the September 28-30 meeting of the American Association of Sanitary Engineers in Miami.

A. R. Abernathy (CE) and L. G. Rich (Engr Adm) presented papers at the September 27-October 1 Water Pollution Federation Conference in Bal Harbour, Florida. J. F. Andrews (CE) served as co-president of a research session at the conference.

A. E. Schwartz (CE) attended an Interim Committee Meeting of the Highway Research Board, Special Committee No. 8 (Nuclear Principles and Applications) at the National Academy of Sciences in Washington, D. C., on September 28-29.

H. B. Howe and R. H. Hunter (Arch) were represented in the 19th Southeastern Annual Exhibition, Atlanta Art Museum, Georgia, September 26-October 25. The exhibition will also be shown at Columbia Museum of Art, Columbia, S.C., November 8-29, 1964; Columbus Museum of Arts and Crafts, Columbus, Georgia, December 13-January 3, 1965; Birmingham Museum of Art, Birmingham, Alabama, January 17-February 7, 1965; Norton Gallery & School of Art, West Palm Beach, Florida, February 19-March 14, 1965; Telfair Academy of Arts and Sciences, Savannah, Georgia, April 1-30, 1965; and The Dulin Gallery of Art, Knoxville, Tennessee, May 9-30, 1965.

B. D. Cloaninger (Fertilizer Dept) presented a paper at the October 7-9 Northeast Fertilizer Conference at Pocono Manor, Pennsylvania.

J. T. Lazar (Dy Sci) participated in the American Dairy Science Association's program planning meeting in Chicago, October 9-13.

R. F. Borgman (Food Sci) presented a paper at the October 15-17 SE Regional Meeting of the American Chemical Society, Charleston, West Virginia.

L. E. Talbert and W. J. Lanham (Ag Econ) participated in the October 13-14 Regional Development Research Conference at Ames, Iowa. J. W. Hubbard (Ag Econ) participated in an October 5-7 Farm Management Conference in Atlanta.

W. D. Stanley (EE) participated in the Allerton Conference on Circuit Theory and System Theory at Monticello, Illinois, September 27-30.

Alfred F. Newton (IE) attended the Southeastern Industrial Arts Conference in Atlanta, Georgia, October 9-10, and presented a paper on the "Status of Industrial Arts in South Carolina."

P. E. Robbins (TC) has been appointed a member of the University Patent Committee.

Wright Bryan (Development) has been appointed a member of the University Archives Committee, replacing G. E. Metz.

W. C. Godley (An Sci) has been appointed a member of the University Lectures Committee.

A. L. Shewfelt (Food Sci) has been appointed a member of the University Library Committee.



NOT FOR PUBLICATION

Vol. 4 No. 5

November 1, 1964

CALENDAR: November 3-17

- Nov. 3-11 Exhibit: "Interaction of Color." Color Prints by Josef Albers.
Lee Gallery, Architecture.
- Nov. 3 T Sage Club. 6:30 p.m., Clemson House.
- Nov. 3 T J. R. Garnett (I.B.M.) will lecture on "The Application of
Electronic Computers to the Textile Industry." 11 a.m.,
Sirrine Auditorium.
- Nov. 3 T R. J. Calhoun (English) will lecture on research in the humanities.
4 p.m., Room 100, Earle Hall
- Nov. 4 W Laicos, 8:15 p.m., Clemson House.
- Nov. 4 W Newcomers Club, 8 p.m., Clemson House.
- Nov. 5 Th Women's Club, 3:30 p.m., Clemson House.
- Nov. 5 Th Harvey T. Stephens (VP., Automatic Retailers of America) will
speak on "Creative Management." 2 p.m., Sirrine Auditorium.
- Nov. 6-7 F,S Homecoming dances. Informal. College dining hall.
- Nov. 6 F "Tigerama." Memorial Stadium. 7 p.m.
- Nov. 7 S Football: Clemson v. North Carolina. Homecoming.
- Nov. 9 M ACC Cross-Country Meet. Afternoon.
- Nov. 9 M Dr. Werner Herz, Florida State University, 4 p.m., Room 118,
Brackett Hall.
- Nov. 9 M Forum Club, 7 p.m., Chemistry Bldg. Conference Room. K. Lehotsky
will speak.
- Nov. 10 T Dr. W. P. Bebbington, Savannah River Plant, E. I. Du Pont de Nemours,
"The Technology of Heavy Water," 7 p.m., Room 100, Earle Hall.
- Nov. 10 T Thomas B. Sain (VP, Burlington Hosiery) will speak on research and
development in the hosiery industry. 11 a.m., Sirrine Auditorium.
- Nov. 10 T Faculty Senate. Regular meeting. 4 p.m., Olin Hall Auditorium.
- Nov. 10 T K. R. Craig (Arch) will lecture on research in Architecture.
4 p.m., Room 100, Earle Hall.

Nov. 11 W Graduate Wives, 8 p.m., Clemson House.

Nov. 16 M Professor P. H. McGauher, Chairman of C.E. Dept., University of California at Berkeley, will deliver a talk on Water Resources Engineering.

Nov. 17 T Fellowship, 6:30, Clemson House.

Nov. 17 T Dr. Fred W. Young will speak on "Growth of Dislocation Free Copper," 4 p.m., 101 Physics Dept.

Nov. 17 T Research Faculty Council. Regular meeting. Room 27, Tillman Hall.

Nov. 17 T J. G. Dinwiddie (Chem) will lecture on research in chemistry. 4 p.m., Room 100, Earle Hall.

Nov. 14-Dec. 5 Exhibit: "Emotional Temperatures of Art." Forty paintings by contemporary American artists. A brief text prepared by Samuel Wagstaff, Jr., (Curator of Paintings, Wadsworth Antheneum, Hartford, Connecticut), accompanies the painting exhibition. Lee Gallery, Architecture.

NOTE: Secretaries of the various campus faculty and staff organizations are requested to turn meeting dates in to the Dean of the University office for inclusion in the University calendar each month.

FACULTY PHOTOGRAPHS FOR TAPS

The Taps staff plans this year to use individual photographs of faculty instead of group pictures as in the past. The schedule for making the photographs is:

<u>Faculty</u>	<u>Place</u>	<u>Date</u>	<u>Hour</u>
Architecture and Engineering	Lounge, CE Bldg.	Nov. 16	9-12, 1-5 p.m.
English, Social Science, Modern Languages, Music, ROTC	Faculty Reading Room Engl-Math Complex	Nov. 17	9-12, 1-5 p.m.
Math, Physics, Chemistry	Faculty Reading Room Engl-Math Complex	Nov. 18	9-12 a.m.
Industrial Management & Textile Science	Student Club Room Sirrine Hall	Nov. 18	1-5 p.m.
Agriculture	Photo Lab, Basement P & A S Building	Nov. 19	9-12, 1-5 p.m.

Any faculty member who is unable to meet the schedule for his group should select another time and place from the list.

NOTES ON OCTOBER MEETING OF TRUSTEES

The University Board of Trustees met Tuesday, October 27, in Columbia. Actions taken by the Board included the following:

--The administration was directed to take necessary preliminary steps arranging for authorization to finance and construct a new student health facility.

--Confirmation was given to executive committee actions regarding the awarding of construction contracts for the chemistry wing, the new library, the motor pool and shop facilities, a shop building and storage area at the Simpson Experiment Station, and women's dormitory number 2.

--The administration was directed to arrange for a revenue bond issue which would provide for air conditioning of the student dining room, kitchen and pantry.

--Reports and recommendations of the State agricultural regulatory agencies administered by the University were approved.

--The resignation of Mr. G. E. Metz was accepted and the appointment of General A. W. Rigsby as Assistant to the President, University Counsel, and Secretary to the Board of Trustees was confirmed.

--A land easement was granted to the Davis Creek Baptist Church (.49 acre), and rights-of-way were granted to the S. C. Highway Department. A land lease to the Dorchester County Airport was renewed.

--A proposed budget for University operations in 1965-66 was approved.

--Special dormitory and dining hall rates for students who arrive prior to matriculation and remain after graduation were approved. (A complete statement on this is elsewhere in the Newsletter.)

--Approval was given to the plan of the administration that students enrolled in the Bell System Regional School might work for course credit.

--The administration was authorized to increase the maintenance and activities fees for part-time undergraduate students from \$9 per semester credit hour to \$10, beginning with the first semester of 1965-66.

--A resolution was adopted in memory of Mr. Charles E. Daniel, life member of the Board who died September 13, 1964. This resolution is printed elsewhere in the Newsletter.

DORMITORY AND DINING HALL RATES FOR SPECIAL STUDENTS

Currently the period of time from the first day of matriculation through the day scheduled for graduation exercises is the basis for determining dormitory and dining hall fees. However, an increasing number of students now arrive on campus prior to matriculation and depart later than graduation. In addition, an increasing number of students now request permission to stay on the campus for brief periods during a semester. These students are usually:

--Those who are required to be on campus for special University programs, athletes, band members, dormitory hall supervisors and members of student or YMCA organizations.

--Graduate students who wish to remain on campus to use library and other University facilities.

--Foreign students who because of expenses or distance involved do not return to their homes.

--Students who are on campus for reasons of personal convenience.

The following dining hall and dormitory rates are to be charged students in the above categories, beginning November 1:

<u>Dormitory</u>	<u>All Students</u>	<u>Male</u>	<u>Female</u>
For less than 1 week	\$1 per night		
For 1 week		\$5.50 per week	\$6 per week
For 1 week and part of another week		\$5.50 plus \$1 per night	\$6 plus \$1 per night

Dining Hall

For less than 1 week -- Breakfast, 65¢; Dinner, 85¢; Supper, 85¢

For 1 week -- \$11

For 1 week and part of another week -- \$11 plus daily rates

Students required by the University to be on campus prior to or after the scheduled term or semester may, upon approval of the Dean of Student Affairs, be exempted from paying the established dormitory rates during such periods.

TIGER BAND TO APPEAR ON TV

The Tiger Band will appear on TV during the halftime of the Baltimore Colts and Minnesota Vikings football game on Nov. 15, CBS Network.

TEACHING LOAD DATA

Information on teaching loads has recently been requested by various agencies and has been prepared according to a system which is to be used by each of the S. C. state-supported colleges and universities. The system used arrives at full-time equivalent students by dividing undergraduate semester credit hours by 15 and graduate semester credit hours by 9. Clemson data for the current semester is:

DATA FOR 1964-65: FIRST SEMESTER

<u>Unit</u>	<u>Full-Time Teacher Equiv.</u>	<u>Undergrad Sem. Hrs. Taught</u>	<u>Graduate Sem. Hrs. Taught</u>	<u>Full-Time Equiv. Students</u>	<u>Teacher- Student Ratio</u>
Agric.	40.9	7750	902	616.7	1:15.1
Arch.	15.3	2927	0	195.1	1:12.8
Arts & Sci.	151.4	48548	1144	3363.6	1:22.2
Engrg.	59.4	10087	656	745.4	1:12.5
IM-Tex. Sci.	21.5	4502	111	312.4	1:14.5
TOTALS	288.5	73814	2813	5233.2	1:18.1

FOREIGN LANGUAGE FILM SERIES

The Department of English and Modern Languages repeats its announcement that the foreign film series for the first semester is underway. Each movie (with English subtitles) will be shown in the Civil Engineering Auditorium, at 7 and 9 p.m.

Membership cards for the series are \$3 for faculty and staff and \$1 for students. These cards may be obtained at the door.

The films still to be shown are:

November 2	My Name is Ivan--Russian
November 12	The Devil Strikes at Night--German
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December 3	Ghengis Kahn--Spanish
December 7	Farewell Doves--Russian
January 7	The Mouse That Roared (color)--English

MINUTES OF THE RESEARCH FACULTY COUNCIL

A regular meeting of the Council was called to order at 4 p.m., in 28 Tillman Hall, October 20, 1964, by P. E. Robbins, Chairman.

The Personnel Relations Committee, consisting of J. B. Pitner, Chairman, Victor Hurst, M. J. Skove, and A. E. Schwartz, will draft a letter to research faculty requesting that research problems be presented to this committee.

A motion was made and carried that "a pay scale for undergraduate student help on research projects should be revised as follows: (a) pay according to ability, (b) raises based on merit, (c) one maximum pay rate regardless of class." The chairman assigned this problem to the Personnel Relations Committee.

The Research Policy Committee consisting of A. C. Elrod, Chairman, R. L. Edwards and E. A. Olson was assigned the following problems: (1) Define the term research and differentiate between testing and research. (2) Define the role of the graduate student with respect to research.

A. L. Shewfelt suggested that an appropriate committee determine the impact of research on Clemson University. This survey would include kinds and titles of research projects, personnel involved, percent of salary coming from research funds, and the total monetary value of research to the University. This was assigned to the Executive Committee.

The meeting adjourned at 5:10 p.m.

COLLEGE ENROLLMENTS TO DOUBLE IN NEXT TEN YEARS

The U. S. Office of Education statisticians recently announced fiscal and enrollment projections for education for the fall of 1973.

They see a virtual doubling of college enrollments as compared with the fall of 1963, to 8 million (as compared to 4.5 million), and an expenditures increase to \$16.5 billion for higher education, as compared to \$9.3 billion in the 1963-64 fiscal year. Expenditure estimates are based on dollar values as of 1961-62.

By 1973, high school graduates will total 3 million annually, an increase of 800,000 over 1963 levels, and bachelor's degrees will jump to 788,000 annually, an increase of 300,000.

By comparison with 1953-54 totals, college enrollments will be triple by 1973. Projections are based on a continuance of trends over the past 10 years.

FACULTY BASIC RESEARCH COMMITTEE MINUTES

The Faculty Basic Research Committee met in the Graduate School Office, 17 Tillman Hall, at 4 p.m. on October 19, 1964. Members present were M. A. Boone, F. I. Brownley, C. Gum, C. E. Littlejohn, H. H. Macaulay, J. E. Miller, B. R. Skelton, and M. A. Wilson.

The Chairman reported that funds available for allocation included:

New allocation from NSF	\$2500.00
Balance in Kress	310.14
Balance in Alumni Loyalty Fund	<u>628.21</u>
	\$3438.35

The Committee considered and approved the following requests:

<u>Professor</u>	<u>Project</u>	<u>Amount</u>
Paul K. Birkhead	Stromatoporoidea of Missouri	\$300.00
Duane F. Bruley	The Mathematical and Experimental Analysis of Entrance Region Flow and Rippling on Vertical Flat Plates	720.00
William C. Capel	Sociology and Social Psychology	182.00
Ireland Regnier	Creative Research in the Fine Arts	500.00
May S. Ringold	Gourdin-Young Letters	<u>251.00</u>
		\$1,953.00

The Committee discussed the support of work in the creative arts, alternative sources of support for research projects, and the advantages and disadvantages of holding regularly scheduled meetings. On the latter point, the Committee felt that meetings should be called whenever the agenda justified.

There is a balance of \$1500 available for the support of basic research in the sciences. Requests for support may be filed at any time and will be considered by the Committee at the first subsequent meeting. Funds for support of research in areas outside the sciences will be limited until early in 1965.

The meeting adjourned at 4:50 p.m.

FORESTRY ACCREDITATION CONTINUED

The Society of American Foresters has advised the University that full accreditation of the Forestry program in the College of Agriculture and Biological Sciences has been continued.

YMCA APPOINTS ASSISTANT SECRETARY

Otis D. Nelson of Anderson, S. C., has been appointed Assistant Secretary of the Clemson YMCA. He has a B.A. degree from the University of Alabama and a B.D. and Master of Religious Education from the Louisville Theological Seminary. He is currently pastor of the North Main Street Baptist Church in Anderson.

Mr. Nelson is married and has two children.

GEOCHEMISTRY OFFERS WIDE RANGE OF SPECIALTIES

We've learned the following from the AIBS Bulletin (October 1962), which learned it from Geotimes (July-August 1962):

A hydromicrobiogeochemist is one who studies small underwater flora and their relationship to underlying rock strata by using chemical methods.

A microhydrobiogeochemist is one who studies flora in very small bodies of water and their relationship to underlying rock strata by using chemical methods.

A microbiohydrogeochemist is one who studies small flora and their relationship to underlying rock strata by using chemical methods and Scuba equipment.

A biohydromicrogeochemist is a very small geochemist who studies the effects of plant life in hydrology.

A hydrobiomicrogeochemist is a very small geochemist who studies wet plants.

A biomicrohydrogeochemist is a very small, wet geochemist who likes lettuce.

BEST TIGERAMA OF ALL IN PRODUCTION

TIGERAMA 1964, the 8th annual presentation of Clemson's all-student variety show, will be paraded for an anticipated 15,000 spectators on Homecoming eve, November 6th. "Curtain time" is 7 p.m. in Clemson Memorial Stadium. The Blue Key-coordinated event will include the crowning of Miss Clemson 1964 and be concluded with the traditional TIGERAMA fireworks display that is said to be South Carolina's most colorful fireworks show each year. Tickets are priced at 49¢ each and may be ordered from TIGERAMA, Box 2518, Clemson University, or purchased at the stadium gates Homecoming eve.

GRADUATE SCHOOL ENROLLMENTS BY SEMESTERS

	1960-61		1961-62		1962-63		1963-64		1964-65
<u>Agriculture</u>									
Agricultural Economics	6	6	7	7	8	9	7	6	8
Agricultural Education	12	7	3	4	7	5	3	3	2
Agronomy	3	3	5	4	4	5	8	10	11
Animal Science	1	2	1	2	1	1	2	2	3
Bacteriology	2	1	2	2	1	1	4	4	3
Dairy	1	2	2	1	3	2	4	7	9
Entomology	8	7	10	8	9	9	13	14	13
Horticulture	10	10	5	8	12	11	10	9	11
Nutrition									2
Plant Pathology	5	5	5	4	7	8	6	7	6
Poultry	2	3	4	4	5	5	4	5	4
Zoology	<u>4</u>	<u>3</u>	<u>5</u>	<u>4</u>	<u>2</u>	<u>3</u>	<u>7</u>	<u>9</u>	<u>16</u>
Total Agriculture	54	49	49	48	59	59	68	76	88
<u>Architecture</u>									
						1	1	2	1
<u>Arts & Sciences</u>									
Chemistry	25	29	32	21	32	30	41	38	37
Economics							1	1	1
Education - English									0
Education - History									3
Education - Mathematics									1
Education - Science									2
Education	19	12	15	13	8	17	9	8	0
English							2	5	8
History									2
Mathematics	4	3	9	8	11	10	17	15	28
Nuclear Science	3	2							
Physics	<u>9</u>	<u>10</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>20</u>	<u>21</u>	<u>27</u>
Total Arts & Sciences	60	56	68	64	63	69	90	88	109
<u>Engineering</u>									
Agricultural Engineering	5	4	7	9	6	7	6	5	10
Bio-engineering									1
Ceramic Engineering	3	1	1	1	7	7	8	8	8
Chemical Engineering	4	4	8	8	10	8	15	14	23
Civil Engineering	1	1		2	5	5	7	7	12
Electrical Engineering	1	2	4	4	6	6	6	6	6
Engineering Mechanics									3
Industrial Education					3	4	2	5	7
Materials Engineering					1	1	1	2	2
Mechanical Engineering	8	6	7	6	10	11	15	15	14
Water Resources Engineering	<u>—</u>	<u>—</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>13</u>	<u>10</u>	<u>6</u>
Total Engineering	22	18	29	33	52	54	73	72	92
<u>Ind. Mgt. & Tex. Sci.</u>									
Textile Chemistry	9	6	7	4	4	4	8	7	6
Industrial Management	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>4</u>	<u>6</u>	<u>6</u>	<u>5</u>	<u>9</u>
Total IM & TS	9	6	7	4	8	10	14	12	15
<u>Unclassified</u>									
	1	1	6	9	9	1	12	4	9
TOTAL ENROLLMENTS	146	130	159	158	191	194	258	254	314

PERSONAL MENTION

L. H. Senn (Ento) served as chairman of the meeting of the Southern Plant Board at Jackson, Mississippi, October 28-29.

A. E. Schwartz (CE) presented a paper ("Failure of Rock In the Triaxial Shear Test") at the Symposium on Rock Mechanics, held at the Missouri School of Mines and Metallurgy, Rolla, Missouri, October 28.

Everett Laitala and James A. Chisman (IE) participated as speakers in the two-day conference of the American Institute of Industrial Engineers, at Augusta, Georgia, October 30-31.

Lewis E. Hill (Economics) spoke on "The Economic Outlook" at the Short Course in Counseling and Guidance at the Georgia Center for Continuing Education at the University of Georgia on October 17.

R. W. Henningson (Dy Sci) delivered the annual report of the Associate Referee for Cryoscopy of Milk and presented a paper at the annual meeting of the Association of Official Agricultural Chemists, October 19-22, in Washington, D. C.

D. E. Roebuck (L-P Lab) presented a paper at the October 18-21 meeting of the Veterinary Laboratory Diagnosticians in Memphis, Tenn.

Harlan McClure (Arch) served as Moderator for the Southeastern Regional Conference of the American Institute of Architects, held in Greenville, South Carolina, on October 29 and 30, and at Clemson University's School of Architecture, Saturday, October 31.

Arnold E. Schwartz (CE) has been elected to serve on the Research Faculty Council for the period 1964-1967. He replaces G. F. Meenaghan of Chemical Engineering, whose term expired in 1964.

M. H. Bruner (Forestry) was the author of two articles which were printed in October. They were "Epicormic Sprouting on Released Yellow-Poplar," Journal of Forestry, Vol. 62; and "How to Adapt Forest Management to Changing Conditions," Forest Farmer, October 1964.

Pete N. Marinos (EE) delivered a paper on Antenna Theory at the National Electronics Conference held in Chicago, Illinois, October 18-21.

J. N. Thurston (EE) will be one of those selected by NSF to evaluate faculty fellowship proposals for 1965-66. The evaluation committee will meet in Washington, D. C., November 11-16.

IN MEMORIAM

Charles Ezra Daniel

November 11, 1895 -- September 13, 1964

WHEREAS, the Members of the Board of Trustees of Clemson University desire to record their profound sorrow at the death on September 13, 1964, of their good friend and esteemed associate, Charles Ezra Daniel, who since 1949 served as a Life Member of this Board;

WHEREAS, in his death, this Board of Trustees, Clemson University, the State of South Carolina, and the United States of America have lost an unselfish and untiring devotee and a truly outstanding and public-spirited citizen;

WHEREAS, as a member and one-time Chairman of this Board's Executive Committee, he gave willingly, quietly and effectively of his time, his talents and his resources to promote the growth of Clemson University and to develop its physical facilities, its faculty strength, and its varied educational, research, and public service programs;

WHEREAS, as a citizen of this State he was without peer in his love for its people and his unremitting labor to enhance the economic and cultural welfare of these people;

BE IT RESOLVED, that the Board of Trustees of Clemson University hereby makes formal acknowledgment of its grievous loss in the death of Charles Ezra Daniel and hereby notes in its official records the passing from this life of a great and good leader who labored well in the love of service, who gave invaluable guidance to the builders of South Carolina and of America, and who dedicated himself in word and deed to the fateful struggle of man for the preservation of human dignity and individual freedom;

RESOLVED FURTHER, that a copy of this resolution be tendered to his family as an expression of this Board's heartfelt sympathy in its bereavement.

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C L E M S O N

Newsletter

NOT FOR PUBLICATION

CLEMSON UNIVERSITY LIBRARY SOUTH CAROLINA ROOM

Vol. 4 No. 6

November 15, 1964

CALENDAR: November 17-December 5

- Nov. 17 T Fellowship Club, 6:30, Clemson House.
- Nov. 17 T Dr. Fred W. Young will lecture on "Growth of Dislocation Free Copper." 4 p.m., 101 Physics Bldg.
- Nov. 17 T J. G. Dinwiddie (Chem) will lecture on research in chemistry. 4 p.m., Room 100, Earle Hall.
- Nov. 17-Dec. 5 Exhibit: "Emotional Temperatures of Art." Forty paintings by contemporary American artists. A brief text prepared by Samuel Wagstaff, Jr., (Curator of Paintings, Wadsworth Atheneum, Hartford, Connecticut), accompanies the painting exhibition. Lee Gallery, Architecture.
- Nov. 17 T Research Faculty Council. Regular meeting. 4 p.m., 28 Tillman Hall.
- Nov. 17 T Miller Williams, Poet, Dept. of English, Louisiana State University, will lecture on "An Argument for Poetry," 4:15 p.m., Room 1, Physics.
- Nov. 18 W Laicos Club, 8:15 p.m., Clemson House.
- Nov. 18 W Newcomers Club, 8 p.m., Clemson House.
- Nov. 18 W Agribusiness Seminar on "Banking and Credit"--Mr. R. B. Tootell, Governor, Farm Credit Administration, Washington, D.C., and Mr. James D. McNair, Vice President of the South Carolina Bankers Association, Aiken, S.C. 4 p.m., Plant & Animal Science Auditorium.
- Nov. 19 Th William C. Laffoday (retail sales mgr., Sears, Roebuck & Co.) will lecture on "Personality Development." 2 p.m., Sirrine Auditorium.
- Nov. 21 S Football: Clemson vs. University of South Carolina.
- Nov. 23 M Forum Club, 7 p.m., Chemistry Bldg. Conference Room.
- Nov. 23 M Dr. Allen Newell, Institute Professor, Systems and Communication Sciences, Carnegie Institute of Technology, will lecture on "Simulation of Human Cognitive Process," 4:30 p.m., Chemical Engineering Auditorium.
- Nov. 23-25 Academic departments follow Th, F, Sat schedules for these days.

- Nov. 24 T Mr. S. B. Farbstein of B. F. Goodrich Chemical Company will speak on "Personal Experiences in Chemical Plant Construction." Sponsored by Student Chapter, American Institute of Chemical Engineers. 7 p.m., Earle Hall, Room 100.
- Nov. 24 T E. M. Lander (History) will lecture on "Research in History." 4 p.m., Room 100, Earle Hall.
- Nov. 24 T R. L. Beacher (International Minerals and Chemical Corporation) will lecture on "Marketing Food-Producing Minerals and Chemicals." 11 a.m., Room A-203, P&AS Bldg.
- Nov. 25 W Graduate Wives, 8 p.m., Clemson House.
- Nov. 26-28 Thanksgiving holidays for students.
- Nov. 30 M Dr. G. Stephen Jones will lecture on "Topologically Convex Sets." Room 101, Physics Bldg. at 4 p.m. Second lecture will be at 7 p.m., with the topic of "Physical Processes Involving Hereditary Dependence." The lectures are sponsored by the Department of Mathematics. Dr. Jones is affiliated with the Institute for Fluid Dynamics at the University of Maryland.
- Dec. 1 T F. S. Love (Secy-Treas, Amer. Textile Mfg. Inst.) will lecture on "Public Relations in Textiles." 11 a.m., Sirrine Auditorium.
- Dec. 1 T Sage Club. 6:30 p.m., Clemson House.
- Dec. 1 T R. H. Hunter (Arch) will lecture on research in Art. 4 p.m., Room 100, Earle Hall. Attendance limited to first 35.
- Dec. 1-2 James H. Finch, FAIA, senior partner of Finch, Alexander, Barnes, Rothschild & Paschal, of Atlanta, Ga., will be visiting critic and lecturer in the School of Architecture. He will give a public lecture in the Architectural Auditorium at 8 p.m. on Dec. 2. This will be followed by an informal coffee hour in the gallery.
- Dec. 3 Th John C. Calhoun, Jr., (Acting Director, Water Resources Research, Washington) will lecture on water problems. 8 p.m., Chemistry Auditorium.
- Dec. 3 Th Movie: "Ghengis Kahn" (Spanish). Civil Engr. Auditorium, 7 and 9 p.m.
- Dec. 3 Th Dr. Edward G. Janzen, University of Georgia, will lecture on "Electron Spin Resonance of Stable Free Radicals," Room 118, Chemistry Conf. Room.
- Dec. 4 F Women's Club Fashion Show, 8 p.m., Clemson House. Members are invited to bring their husbands, or one other guest.
- Dec. 4 F Swimming: Clemson vs. UNC.
- Dec. 5 S Basketball: Clemson vs. Georgia.
- Dec. 5 S Swimming: Clemson vs. Appalachian.

NOTE: Secretaries of the various campus faculty and staff organizations are requested to turn meeting dates in to the Dean of the University's office for inclusion in the University calendar each month.

MINUTES: THE FACULTY SENATE OF CLEMSON UNIVERSITY

The one-hundredth meeting of the Clemson Faculty Senate was held at 4 p.m., Tuesday, October 13, 1964, in Room #1 of the Physics Building, Dr. John E. Miller presiding.

1. At Dr. Miller's request, Dr. J. E. Halpin spoke to the Senate, explaining the purpose and responsibilities of the new position of "Counselor to Athletes" to which he was recently appointed.

After thanking Dr. Halpin for this information, Dr. Miller requested reports from the committee chairmen.

2. Dr. Shewfelt reported for the Welfare Committee that 1,090 had chest x-rays on September 21 and 22, and 343 received influenza immunization October 1 and 8. Dr. Shewfelt will distribute another letter concerning flu shots to be given in November.

Dr. Shewfelt further reported that the Welfare Committee had discussed:

- A. Possible need for a burial association--to be investigated by Mr. Felder.
- B. Requests for the placing of bulletin board type maps of the campus at various strategic locations around the campus--to be investigated by Mr. Joe Young.
- C. A complaint about automobile stickers and a question of placing a Clemson University emblem on the door of new University-owned cars--also to be investigated and discussed later.

3. Mr. George Means, Chairman of the Policy Committee stated that his committee had two items for the president to refer to the proper committees, (1) a request that the University procure several buses for use on field trips (possibly at the time of the purchase of new cars); and (2) the question of the use of salary "Plan A" by some faculty members and its possible effect on their Travelers Insurance.

4. Mr. Ball, Chairman of the Scholarship and Admissions Committee, announced that a proposal had been submitted to alter the regulations on academic dishonesty, but, after consideration, had been disapproved by the committee.

This committee also requested from Mr. Vickery information concerning the probability of students who started with a low grade-point-ratio eventually being graduated. The Registrar's Office is now making a study of this matter, soon to be completed.

5. A resolution concerning the untimely death of Colonel Frederick G. Stritzinger was unanimously adopted.

6. The problem of parking was discussed. A letter from Mr. Ralph Collins of the Traffic and Parking Control Committee was read, asking for suggestions from the Senate. It was reported that a committee representing the Mathematics and Physics Departments is now working on the problem of parking behind the Physics Building. This committee is not related to the Faculty Senate.

7. The Senate approved the wording to be placed on the plaque for the Faculty Scholarship Award winners.

FACULTY SENATE MINUTES CONTINUED

8. Mr. Felder suggested that a pre-college reading list be sent by Clemson University to prospective college students in S. C. high schools. This proposal was referred to the Committee on Scholarships and Admission.

9. The president urged that attendance at all Faculty Senate committee meetings be improved. A motion was made, seconded, and passed that the next meeting of the Senate be held in Room #1 of the Physics Building. Mr. Joe Young suggested that the time of meeting should be changed from Tuesday at 4 p.m. until Thursday at 4:00 or Tuesday at 5:00, since there are now some classes lasting until 5:00 on Tuesdays. However, this being a subject which required a constitutional amendment, it was deferred to a later meeting.

10. There being no further business, the meeting was adjourned.

Absent: L. H. Davis, Emery Gunnin, W. B. Barlage.

1090 EMPLOYEES HAVE TUBERCULAR X-RAYS

A total of 1090 Clemson University employees received chest X-rays during the two-day tuberculosis control program staged here in mid-September by the South Carolina State Board of Health. Of the total, 1050 subjects produced X-ray films that were analyzed as essentially negative. Only one negative indicated definite tuberculosis. Dr. Judson E. Hair, director of student health services, expressed gratification at the large number of participants and expressed the hope that the program will be continued as an annual recheck.

POULTRY SCIENCE CLUB TURKEY SALE

The Clemson University Poultry Science Club has approximately 70 frozen turkey hens and 25 turkey toms for sale. The oven-ready weight of the hens ranges from 11.9 to 16.8 pounds and the toms from 18.4 to 26.7 pounds. These turkeys will be on sale in the lobby of the Food Industries Building at 39¢ and 37¢ per pound for hens and toms respectively on the schedule indicated below:

Friday, November 20	1 to 5:30 p.m.
Saturday, November 21	9 a.m. to 12 noon
Monday, November 23	3 to 6:30 p.m.

Please do not call in advance of these dates for reservation of a turkey. They will be sold on a first-come, first-served basis at the times indicated.

HENRY COLEMAN '26 ALUMNI PRESIDENT-ELECT

On January 1, William H. Grier '23 succeeds Harold Risher '38 as national president of the Clemson Alumni Association. Dr. Grier, who is president of the Rock Hill Printing and Finishing Company, has served as president-elect during 1964.

In elections just completed, Henry Coleman '26 was elected president-elect for 1965 and will serve as the Association's national president in 1966. He is chairman of the board of the Commercial Bank of Daytona Beach, Fla. Robert Stoddard '41, mayor of Spartanburg and a former trustee of Clemson University, was elected alumni vice president for 1965.

The National Council of the Alumni Association and the Trustees of the Clemson Foundation held regularly scheduled meetings on the campus Homecoming weekend.

FACULTY PHOTOGRAPHS FOR TAPS: A REPEATED ANNOUNCEMENT

The Taps staff plans this year to use individual photographs of faculty instead of group pictures as in the past. The schedule for making the photographs is:

<u>Faculty</u>	<u>Place</u>	<u>Date</u>	<u>Hour</u>
Architecture and Engineering	Lounge, CE Bldg.	Nov. 16	9-12, 1-5 p.m.
English, Social Science, Modern Languages, Music, ROTC	Faculty Reading Room Engl-Math Complex	Nov. 17	9-12, 1-5 p.m.
Math, Physics, Chemistry	Faculty Reading Room Engl-Math Complex	Nov. 18	9-12 a.m.
Industrial Management & Textile Science	Student Club Room Sirrine Hall	Nov. 18	1-5 p.m.
Agriculture	Photo Lab, Basement P & A S Building	Nov. 19	9-12, 1-5 p.m.

Any faculty member who is unable to meet the schedule for his group should select another time and place from the list.

BARBECUE PRECEDING CAROLINA GAME

The Clemson Junior Class sponsors a barbecue preceding each home football game. Plates are served from 12:00-2:00 p.m. at the side of the field house near the tennis courts. Cost is \$1.25 per person.

SCHOLARSHIP PLAQUE

The Faculty Senate has approved the wording to appear on a plaque to be erected in Tillman Hall, honoring winners of the annual faculty scholarship award. The wording will be:

FACULTY SCHOLARSHIP AWARD

Awarded annually by the Academic Faculty of Clemson University to the members of the graduating class with the highest scholastic achievement.

ADDITIONAL BOTANY TEACHER TO JOIN FACULTY

Gary E. Dillard of Ridgeway, Illinois, will join the Department of Botany and Bacteriology in January as assistant professor of Botany. He has his bachelor's and master's degrees from Southern Illinois University and is currently completing his doctorate at N. C. State. He has had two years of teaching experience and is the author or co-author of eight research publications. He is a member of Phi Sigma and Sigma Xi.

He is married to the former Marilyn Sue Bradley of Ridgeway, Illinois, and they have one child.

COMMENCEMENT SPEAKER IS ANNOUNCED

United States Congressman L. Mendel Rivers of Charleston, chairman-designate of the powerful House Armed Services Committee in 1965-66, will deliver Clemson University's commencement address on May 29, 1965.

In making the announcement, President Robert C. Edwards said, "It will be an honor to have Congressman Rivers make our commencement address of 1965. Few men today are more knowledgeable of our armed services' strength and needs, and no man in the future is scheduled to play a more important role in this area than this distinguished South Carolinian."

CURRICULUM CHANGES AND ADDITIONS

During October the school and college curriculum committees and the educational council approved a number of new courses and other curriculum changes and additions. These are briefly described below:

1. A new curriculum in textiles. This new curriculum, to begin in the fall of 1965, will lead to a B.S. degree in Textiles and will replace the present curricula in Textile Management and Textile Science, which will be phased out. The new curriculum is as follows:

BACHELOR OF SCIENCE IN TEXTILES

Freshman Year

First Semester

Chem 101 General Chemistry.....	4 (3,3)
EG 109 Engr. Com. & Dsn.....	3 (1,6)
Engl 101 Engl. Composition.....	3 (3,0)
Text 122 Intro. Textiles.....	3 (2,3)
Math 105 Algebra and Trig.....	4 (4,0)
AS or MS Basic.....	1 (2,1)
	<u>15 or 18</u>

Second Semester

Chem 102 General Chemistry.....	4 (3,3)
Engl 102 Engl. Composition.....	3 (3,0)
Hist 104 Western Civilization.....	3 (3,0)
Math 106 Anal. Geom., Cal. I.....	4 (4,0)
*Text 122 Intro. Textiles.....	3 (2,3)
AS or MS Basic.....	1 (2,1)
	<u>15 or 18</u>

Note: Freshmen taking Remedial Math (Math 103R) will take Text 122 in second semester; others in first semester. Freshman adviser may place students in Text 122 for second semester where he deems it advisable.

Sophomore Year

Econ 201 Prin. of Economics.....	3 (3,0)
Engl 203 Sum. of Engl. Lit.....	3 (3,0)
Math 205 Anal. Geom., Cal II.....	4 (4,0)
Phys 122 Mech. & Wave Phen.....	3 (3,0)
Text 201 Fiber Processing I.....	3 (2,3)
AS or MS Basic.....	1 (2,1)
	<u>17</u>

Econ 202 Prin. of Economics.....	3 (3,0)
Engl 204 Sum. of Engl. & Am. Lit....	3 (3,0)
Math 206 Anal. Geom., Cal III.....	4 (4,0)
Phys 221 Therm. & Elec. Phen.....	3 (3,0)
Phys 223 General Physics Lab.....	1 (0,3)
Text 202 Fiber Processing II.....	3 (2,3)
AS or MS Basic	1 (2,1)
	<u>18</u>

Junior Year

Text 311 Fabric Development I.....	3 (2,3)
TC 203 Textile Chemistry.....	3 (3,0)
TC 205 Textile Chemistry Lab.....	1 (0,3)
Text 303 Fiber Processing III.....	3 (2,3)
Text 321 Fiber Science.....	3 (2,3)
Phys 222 Optics & Mod. Physics.....	3 (3,0)
Phys 224 General Physics Lab.....	1 (0,3)
Approved Electives.....	3
	<u>20</u>

TC 204 Textile Chemistry.....	3 (3,0)
TC 206 Textile Chemistry Lab.....	1 (0,3)
Text 324 Textile Statistics.....	3 (3,0)
Text 304 Fiber Processing IV.....	3 (2,3)
Text 312 Fabric Development II.....	3 (2,3)
Text 322 Prop. of Text. Structures..	3 (2,3)
*Approved Electives.....	3
	<u>19</u>

Senior Year

TC 304 Quality Control.....	3 (3,0)
TC 315 Textile Chemistry.....	3 (3,0)
TC 317 Textile Chemistry Lab.....	1 (0,3)
Text 411 Fabric Development III.....	4 (3,3)
Text 421 Textile Costing I.....	3 (2,3)
Text 423 Seminar and Research.....	1 (1,0)
Text 414 Knitting.....	3 (2,3)
	<u>18</u>

Engl. 304 Adv. Composition.....	3 (3,0)
IM 408 Motion & Time Study.....	3 (2,3)
Text 412 Fabric Development IV.....	4 (3,3)
Text 422 Textile Costing II.....	3 (2,3)
Text 426 Instrumentation.....	3 (3,0)
*Approved Electives.....	3
	<u>19</u>

TEXTILE CHEMISTRY MAJOR

Freshman Year

First Semester

Ch 101 General Chemistry.....	4 (3,3)
EG 109 Engr. Graphics.....	3 (1,6)
Engl 101 Engl. Composition.....	3 (3,0)
Math 105 Algebra and Trig.....	4 (4,0)
AS or MS Basic.....	1 (2,1)

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Second Semester

Ch 102 General Chemistry.....	4 (3,3)
Engl 102 Engl. Composition.....	3 (3,0)
Math 106 Anal. Geom., Cal. I.....	4 (4,0)
Hist 104 Western Civilization.....	3 (3,0)
Econ 201 Prin. of Economics.....	3 (3,0)
AS or MS Basic.....	1 (2,1)

18

Sophomore Year

TC 203 Text. Chem.....	3 (3,0)
TC 207 Text. Chem. Lab.....	2 (0,6)
Engl 203 Survey of Engl. Lit.....	3 (3,0)
Math 205 Anal. Geom., Cal. II.....	4 (4,0)
Phys 122 Mech. & Wave Phen.....	3 (3,0)
Ch 219 Chem. Prin.....	2 (2,0)
AS or MS Basic.....	1 (2,1)

18

TC 204 Text. Chem.....	3 (3,0)
TC 208 Text. Chem. Lab.....	2 (0,6)
Engl 204 Survey of Engl. Lit.....	3 (3,0)
Math 206 Anal. Geom., Cal. III.....	4 (4,0)
Phys 221 Ther. & Elec. Phen.....	3 (3,0)
Phys 223 Gen. Phys. Lab.....	1 (0,3)
Text 305 Yarn Structure I.....	3 (2,3)
AS or MS Basic.....	1 (2,1)

20

Junior Year

Ch 331 Phys. Chem.....	3 (3,0)
TC 315 The Chem. of Fibers.....	3 (3,0)
TC 317 Synthetic Fibers Lab.....	1 (0,3)
Math 306 Ord. Diff. Equation.....	3 (3,0)
Phys 222 Opt. & Mod. Phys.....	3 (3,0)
Phys 224 Gen. Phys. Lab.....	1 (0,3)
Text 306 Yarn Structure II.....	3 (2,3)
*Approved Elective.....	3

20

Ch 332 Phys. Chem.....	3 (3,0)
TC 316 Chem. of Bleaching & Surface Active Agents.....	3 (2,3)
Ch 316 Quan. Analysis.....	5 (3,6)
Text 322 Prop. of Text. Structures..	3 (3,2)
*Approved Elective.....	3

17

Senior Year

TC 457 Dyeing & Finishing I.....	3 (3,0)
TC 459 Dye Lab.....	1 (0,3)
Text 324 Textile Statistics.....	3 (3,0)
TC 475 Cellulose Chem.....	2 (2,0)
Text 313 Fabric Structure I.....	3 (2,3)
Engl 304 Adv. Comp.....	3 (3,0)
TC 461 Seminar and Research.....	2 (0,6)
*Approved Elective.....	3

20

TC 448 Dyeing & Finishing II.....	3 (3,0)
TC 450 Dye Lab.....	1 (0,3)
TC 466 Textile Unit Operations.....	3 (3,0)
IM 304 Quality Control.....	3 (3,0)
Text 321 Fiber Science.....	3 (2,3)
*Approved Elective.....	3

16

*Approved electives for Bachelor of Science in Textiles:

Courses in the following fields (Jr. or Sr. level) beyond those required:

Textiles
Textile Chemistry
Chemistry
English
Mathematics (especially computer programming, Math 310)
Engineering
Management
Physics
Social Sciences
Advanced Air Science or Military Science up to 6 credits.

*Must include 3 credits in Social Sciences.

2. A new curriculum in Textile Chemistry. This curriculum which will lead to a B.S. degree is to begin in the fall of 1965, and will replace the current TC undergraduate program. Consult page for new curriculum.

*Approved electives for Textile Chemistry Major:

Courses in the following fields (Jr. or Sr. level) beyond those required:

Textiles
Textile Chemistry
Chemistry
English
Mathematics (especially computer programming, Math 310)
Engineering
Management
Physics
Social Sciences
Advanced Air Science or Military Science up to 6 credits

*Must include 3 credits in Social Sciences.

3. New programs and courses in the College of Agriculture and Biological Sciences.

- A. In Agronomy, effective in 1964-65, crop science is to become a major in the departmental doctoral program.
- B. In Botany-Bacteriology, effective in 1964-65, a graduate program will be offered, leading to the M.S. in microbiology. This new program will replace the currently offered master's curriculum in bacteriology.
- C. In Botany-Bacteriology, effective in 1964-65, a graduate program will be offered leading to the M.S. degree in plant physiology.
- D. In Forestry, effective in 1965-66, a graduate program will be offered leading to the M.S. degree.

E. Five new courses will be offered, beginning in 1964-65 or 1965-66:

- (1) Bact 411--Pathogenic Bacteriology--3 cr. (2,3); to be taught by J. M. Rush; does not replace a course currently being taught, but will alternate semester-by-semester with Bact. 410.
- (2) Botany 406--Plant Anatomy--3 cr (2,3); to be taught by R. P. Ashworth.
- (3) Botany 511--Inorganic Plant Metabolism--4 cr. (3,3); to be taught by J. B. Whitney; replaces present course Botany 501.
- (4) Entomology 691--doctoral research--credit to be arranged.
- (5) Zoology 563--Special Problems--credit to be arranged.

F. The name of Botany 505 will be changed from "Special Problems in Plant Pathology" to "Special Problems in Botany."

4. New programs and courses in the College of Arts and Sciences.

- A. Effective in 1965, the Chemistry and Geology Department and the Biological Sciences departments will offer a minor in Biology under the B.A. program.
- B. In the B.A. curriculum for prospective mathematics teachers, as well as the B.S. curriculum in Science Teaching and the math minor under the B.A. program, upgrading of the mathematics requires the listing of Math 106 as the starting course in mathematics and the curricula have been rearranged accordingly.
- C. The Chemistry and Geology Department will start mathematics requirements with Math 106. In addition, English 301 (Public Speaking) has been dropped in Chemistry curricula and Chemistry 442 has been reduced from two hours to one hour.
- D. Effective in 1965-66 the Department of Chemistry and Geology will offer a program leading to a B.S. degree in Geology, as shown below:

Curriculum for B.S. Degree in Geology

Freshman Year

First Semester

Chem 101 General Chemistry.....	4 (3,3)
Engl 101 Engl. Composition.....	3 (3,0)
Hist 101 American History.....	3 (3,0)
Math 106 Anal. Geom. Cal. I.....	4 (4,0)
Modern Language*.....	3 (3,0)
AS or MS Basic.....	1 (2,1)

18

Second Semester

Chem 102 Gen. Chemistry.....	4 (3,3)
Engl 102 Engl. Composition.....	3 (3,0)
Hist 102 American History.....	3 (3,0)
Math 205 Anal. Geom. Cal. II.....	4 (4,0)
Modern Language.....	3 (3,0)
AS or MS Basic.....	1 (2,1)

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Sophomore Year

Geol 201 Physical Geology.....	3 (3,0)
Geol 203 Phys. Geology Lab.....	1 (0,3)
Zool 101 Gen. Zool.....	3 (3,0)
Zool 103 Gen. Zool. Lab.....	1 (0,3)
Engl 203 Survey of Engl. Lit.....	3 (3,0)
Math 206 Anal. Geom. Cal III.....	4 (4,0)
Modern Language.....	3 (3,0)
AS or MS Basic.....	1 (2,1)

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Geol 304 Historical Geology.....	3 (3,0)
Geol 305 Hist. Geol. Lab.....	1 (0,3)
Bot 101 General Botany.....	3 (3,0)
Bot 103 General Botany Lab.....	1 (0,3)
Engl 204 Survey of Engl. & Am. Lit...	3 (3,0)
Modern Language.....	3 (3,0)
AS or MS Basic.....	1 (2,1)

15

Junior Year

Geol 306 Mineralogy.....3 (2,3)
 Phys 211 Gen. Phys. for Engr.....4 (4,0)
 Phys 213 Gen. Phys. Lab.....1 (0,3)
 Electives**.....9

15

Geol 309 Petrology.....3 (2,3)
 Geol 311 Stratigraphy and
 Sedimentation.....3 (3,0)
 Phys 212 Gen. Phys. for Engr.....4 (4,0)
 Phys 214 Gen. Phys. Lab.....1 (0,3)
 Ex. St. 410 Intro. Statistics.....3 (2,3)
 Electives.....3

17

Summer Geology Field Camp***.....6 hours

Senior Year

Geol 402 Structural Geology.....3 (3,0)
 Geol 403 Invert. Paleontology.....3 (2,3)
 Approved electives.....9

15

Geol 307 Optical Mineralogy.....3 (2,3)
 Geol 404 Economic Geology.....2 (2,0)
 Approved Electives.....10

15

- * German or French is recommended. Two years in the same language is required.
- * At least 12 hours must be elected from the humanities and/or social sciences.
- * Clemson University does not conduct a field camp in geology but attendance at a camp approved by the geology staff is required.

E. Effective in 1965-66 the Mathematics Department will change the name of the B.S. curriculum in Applied Math to "B.S. in Mathematics." It is the feeling of the Department that by providing options in the junior and senior years, students could be prepared to enter graduate schools in pure mathematics, or by exercising the proper option, students could be trained for work in Physics, Operations Research, Computer Science, Managerial Science or Communications.

F. Effective in 1965 the Department of Social Sciences will add Psychology as a secondary field of concentration under the Bachelor of Arts curriculum.

G. Effective in 1965-66, the College of Arts and Sciences will change the required number of hours for the B.A. curricula from "131-135" to "128-135"; and the required number of hours for the pre-medicine curriculum from the present level to 135.

H. Effective in January 1965, nineteen new courses will be offered:

- (1) Chemistry 330 Introduction to Physical Chemistry 4 cr. (4,0)
- (2) Econ 410 Economic Development 3 cr. (3,0)
- (3) Education 301 History of American Education 3 cr. (3,0)
 Change in title and number only replaces Education 201.
- (4) English 332 Creative Writing 3 cr. (3,0)
 A continuation of English 331 in order for a student to
 take additional hours in creative writing.

- (5) History 309 History of England to 1603 3 cr. (3,0)
Old History 309 is being divided into periods. The first period will be Hist 308; the second will be Hist 309.
- (6) Math 103-R College Algebra (Remedial) 2 cr. (5,0)
This course will take the place of old Math 100 but allow 2 credits for 5 hours of theory. This will eliminate duplication of subject matter currently existing between Math 100 and Math 103.
- (7) Math 501 Group Theory 3 cr. (3,0)
To be taught by W. R. Hare
- (8) Math 556 History of Mathematics 3 cr. (3,0)
To be taught by C. V. Aucoin for students in the M.Ed. program.
- (9) Physics 132 General Physics for Physics majors 3 cr. (3,0)
- (10) Physics 133 Exp. Physics for Physics majors 1 cr. (0,3)
- (11) Physics 231 Gen. Physics for Physics majors II 3 cr. (3,0)
- (12) Physics 232 Gen. Physics for Physics majors III 3 cr. (3,0)
- (13) Physics 233 Exp. Physics for Physics majors II 1 cr. (0,3)
- (14) Physics 446 Solid State Physics 3 cr. (3,0)
Taught by M. G. Miller
- (15-17) Physics 182, 281 and 282 are three credit honors courses replacing the present Physics 281 and 282.
- (18) Psych 403 Personality 3 cr. (3,0)
- (19) Rel. 303 A Survey of World Religions 3 cr. (3,0)
Will provide a third elective in religion.

ENGINEERING CURRICULA REACCREDITED

The Engineers' Council for Professional Development at a meeting on October 5-6 announced the reaccreditation of Clemson's departments of Agricultural, Ceramic, Chemical, Civil, Electrical and Mechanical Engineering.

NATIONAL DATA ON DEGREES AWARDED: 1962-63

Total degrees at all levels reached an all-time high in the 1962-63 academic year, according to a summary report by the Division of Educational Statistics, U. S. Office of Education. During the year ended June 30, 1963, some 410,000 bachelor's degrees were conferred, an increase of 7 percent over the previous year. First-professional degrees requiring 5 or more years' work totaled 40,300, a 7 percent increase; master's degrees totaled 91,400, an increase of 8 percent, and doctoral degrees 12,800, an increase of 10 percent.

The summary table reports degrees by level and by state. Nevada was the only state in which no earned doctoral degrees were conferred during the year, although Maine reported only 1 and Alaska and Vermont, 3 each. States of New York, California, and Illinois exceeded the 1,000 mark in doctoral degrees conferred. Greatest percentage increases in degrees at the bachelor's (less than 5 years level) over the previous year were in foreign languages and literature, law, and the biological sciences. Engineering showed a 4.1 percent loss at this level, but figures for the 5-year degree were not available. At the master's level, greatest percentage increases were in mathematics, the health professions, and foreign languages and literature. Agriculture (which showed a slight increase at the bachelor's level) had a loss of 2.8 percent at the master's level, while engineering showed an 8.1 percent increase. Forestry showed a sharp drop of 26 percent at the master's level, largest for any listed field, though it had a slight increase at the B.S. level.

At the doctoral level, greatest increases were in mathematical subjects and fine and applied arts. Engineering showed a substantial (14.2 percent) increase, agriculture a slight (1.2 percent) loss, forestry at 21.2 percent loss.

Meanwhile another recent Office of Education study cast some light on the variety of earned degrees granted at the doctoral level by U. S. universities. "The Number and Kind of Earned Doctor's Degrees Awarded by U.S. Institutions in 1961-62" by John L. Chase, Chief of the Higher Education Personnel Section of the Division of Educational Organization and Administration, showed that in 1961-62 there were 36 different kinds of earned doctoral degrees conferred by 197 institutions.

Of the 11,669 doctorates awarded in 1961-62, 83.8 percent were doctorates in philosophy and 11.2 percent doctorates in education. Thus, the other 34 kinds of degrees conferred represented collectively only 5 percent of the total. Third most popular earned degree was doctor of science (115) followed by doctor of theology (94), doctor of business administration (55), doctor of engineering (47), doctor of sacred theology (33), doctor of engineering science (32), doctor of musical arts (28) and doctor of juridical science (20).

Dr. Chase leaves the question of whether or not there are too many different kinds of doctorates being awarded to more definitive studies which would examine the history of the degree, its distinctive requirements, and careers pursued by its recipients. He does suggest that the facts indicate a "need for caution." Some 17 of the types of degrees granted in 1961-62 were granted by only one institution.

GIFTS AND GRANTS

The following gifts and grants have been reported since the last issue of the Newsletter was printed.

1. From State Soil Conservation Commission, \$8,000 to the Agronomy and Soils Dept. for technical service in acceleration of Soil Survey program in cooperation with Soil Conservation Service.
2. From Entomology Research Division, Agricultural Research Service, USDA, additional \$5,000 for research at Pee Dee Station and Truck Station on insects and mites affecting vegetables, berries, cotton and flue-cured tobacco.
3. From Union Carbide Corporation, \$1,500 to the Entomology Department for a study of the effect of SEVIN carbaryl sprays on livestock weight gains.
4. From Savannah Sugar Refining Corporation, \$1,000 to the Animal Science Dept. for a study of supplements to wintering rations for steers fed pelleted Coastal Bermuda Hay.
5. From Gerber Products Company, \$3,000 to the Horticulture Dept. for investigations of growth, yield, and fruit quality of pears.
6. From American Cyanamid Company, \$1,000 to the Entomology Dept. for investigation of organic phosphate insecticides.
7. From C. E. Littlejohn, Sr., \$100 to chemical engineering for the purchase of reference books.
8. From Chemstrand Company, \$1,000 to the Graduate School for support of graduate study.
9. From Commercialores, \$500 for a graduate fellowship in Ceramic Engineering.
10. From Lead Industries Association, \$2,500 for a graduate fellowship in Ceramic Engineering.
11. From International Lead Zinc Research Organization, \$2,500 for a graduate fellowship in Ceramic Engineering.
12. From U. S. Office of Education, twelve new NDEA graduate fellowships for three years' study toward the Ph.D. degree in the following fields: Agricultural Economics (4), Chemical Engineering (2), Civil Engineering (3), and Physics (3).
13. From the David Schwartz Foundation, \$1,000 to the School of IM and TS for two Jonathan Logan scholarships.
14. From the Institute of Applied Technology, Department of Commerce, \$2,063 to S. M. Willis (I.M.) to study the competitive position of the textile industry; and \$1,930 to S. O. Park (I.M.) to study changing patterns in the concentration and diversification of the textile industry; and \$2,455 to B. R. Skelton (Soc. Sci.) for a study of international textile markets.

PERSONAL MENTION

Hugh McGarity (Music) and Mrs. McGarity presented a concert at Central Wesleyan College, Tuesday, October 20.

H. N. Coledge, Jr., (Arch) is author of an article ("Samuel Sloan and the Philadelphia School of Hospital Design 1850-1880") in the June issue of Charette (the Journal of Pennsylvania Architecture).

H. L. Hunter (A&S) served as a member of the Southern Association Self-Study Committee which visited The University of the South, November 1-5.

J. K. Williams (Adm) served as chairman of the Southern Association Self-Study Committee which visited the University of the Americas in Mexico City, November 7-12.

R. C. Edwards (Adm) served as President of the Southern Land-Grant and State Universities Conference at Memphis, Tennessee, October 11-13.

An international edition of "Unit Operations of Sanitary Engineering" by L. G. Rich (Engr) has just been published by the Toppan Company of Tokyo, Japan. This publication follows by a year the book's Spanish translation.

H. E. McClure (Arch) will serve as a member of the National Architectural Accrediting Board Visiting Team to Columbia University, November 11-13.

G. E. Stembridge (Hort) delivered a paper at a meeting of the National Society of Soil and Plant Diagnosticians, Washington, D. C., October 22-23.

J. F. Miles (Ag Eco) served as chairman of a session at the Agricultural Development Council Workshop held at Southern Illinois University, October 22-24.

The Clemson University Band presented the half-time program at the professional football game between Baltimore and Minnesota in Baltimore on November 15.

C. E. Littlejohn (Ch E) and J. H. Moore (C E) have been invited to participate in an NSF panel to choose recipients of NSF Traineeships in 1965-66.

J. P. Uldrick (EM) has a paper "On the Swimming of a Flexible Plate of Arbitrary Finite Thickness" in the September 1964 issue of the Journal of Fluid Mechanics.



C L E M S O N

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM
Newsletter

NOT FOR PUBLICATION

Vol. 4 No. 7

December 1, 1964

CALENDAR: December 3-January 4

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| Dec. 3 | Th | John C. Calhoun, Jr., (Acting Director, Water Resources Research, Washington) will lecture on water problems. 8 p.m., Chemistry Auditorium. |
| Dec. 3 | Th | Movie: "Ghengis Kahn" (Spanish). Civil Engr. Auditorium, 7 and 9 p.m. |
| Dec. 3 | Th | Edward G. Janzen (University of Georgia) will speak on "Electron Spin Resonance of Stable Free Radicals." Room 118, Chemistry Conf. Room. |
| Dec. 4 | F | Women's Club Fashion Show, 8 p.m., Clemson House. Members are invited to bring their husbands, or one other guest. |
| Dec. 4 | F | Swimming: Clemson vs. UNC. |
| Dec. 5 | S | Basketball: Clemson vs. Georgia. |
| Dec. 5 | S | Swimming: Clemson vs. Appalachian. |
| Dec. 7 | M | Basketball: Clemson vs. Citadel |
| Dec. 7 | M | Movie: "Farewell Doves." Russian Language film with English subtitles. 7 and 9 p.m., Civil Engineering Auditorium. |
| Dec. 7 | M. | Swimming: Clemson vs. Davidson. |
| Dec. 8 | T | Arthur Magill (Pres., Her Majesty Co.) will speak on "The Changing Pace of the Garment Industry." 11 a.m., Sirrine Auditorium. |
| Dec. 8-29 | | Exhibition: Leonard Baskin Prints. Woodcuts, wood-engravings and etchings by one of America's foremost artists, Leonard Baskin. Sculptor, print-maker, and book publisher, Baskin establishes and reinforces his fine reputation with this exhibition of thirty original prints. Lee Gallery, Architecture. |
| Dec. 8 | T | J. K. Brown (Union Bleachery) will speak on "The Engineer as a Manager." 7 p.m., Room 100, Earle Hall. |

Dec. 8	T	Miss Savannah Smith will discuss Holiday foods. 8 p.m., Room B-209, P&AS Building.
Dec. 8	T	Regular meeting, Academic Faculty Senate. 4 p.m., Olin Hall.
Dec. 9	W	S. F. Hulbert (Ceramic Engr) will speak on "Grain Boundary Conference." 4 p.m., Room 200. Olin Hall.
Dec. 13	S	Sunday afternoon concert --- YMCA.
Dec. 15	T	H. G. Spencer (Chem) will speak on "Research in Physical Chemistry." 4 p.m., Room 100, Earle Hall.
Dec. 15	T	Regular meeting, Research Faculty Council. 4 p.m., Room 28, Tillman Hall.
Dec. 16	W	Basketball: Clemson vs. Duke.
Dec. 17-18	Th-F	Hans Sagan (N.C. State) will lecture at 4 p.m. Thursday on "The Sturm-Liouville Problem"; at 7 p.m. Thursday on "A New Look at the Calculations of Variations-Dynamic Programming"; and at 11 a.m. Friday on "Approximate Methods From the Functional Analytic Standpoint." All lectures in Room 101, Physics Building.
Dec. 19	S	Students leave for Christmas holidays.
Dec. 28-29		Basketball: Poinsettia tournament at Greenville (Clemson, Auburn, Furman, Baylor).
Jan. 4	M	Classes resume.

FELLOWSHIPS AND RESEARCH AWARDS

The Graduate School has recently been notified of the following grants for further study and research. A file with complete information about each grant is available in the Graduate School Office.

NATO Research Fellowships and Visiting Professorships are offered during 1965-66. The Fellowships are intended for scholars of established reputation to promote study and research for 2 to 4 months on the Atlantic Community and the problems which confront it. Lectureships are awarded for 10 - 20 week periods and are tenable in Denmark, Greece, and the Netherlands. Applications must be submitted before December 20.

Space Technology Laboratories Fellowships for doctoral and post-doctoral study at MIT or Cal Tech are open to persons who have completed at least one year of graduate study in mathematics, engineering, or science. Fellows will work during the summer at STL and spend the academic year in study at MIT or Cal Tech. Stipend will be \$4,000 or higher. Apply before January 21.

Oak Ridge Institute for Nuclear Studies sponsors a Research Participation Program whereby scientists may spend 3 months or longer at Oak Ridge, Savannah River or Puerto Rico Nuclear Center. Recipients will be paid their normal monthly salary plus \$75 a month. Applications for summer appointment should be filed by December 15.

The American - Scandinavian Foundation offers 8 fellowships of up to \$2000 for graduate study in Scandinavian countries.

U.S. Government Resident Research Associateships are given to provide young investigators an opportunity for advanced training in basic research in many fields. The annual stipend is \$10,250 plus a moving allowance. Application must be submitted by February 1. The grants are tenable at the following laboratories and research centers:

AGRICULTURAL RESEARCH SERVICE in
the U. S. DEPARTMENT OF AGRICULTURE
Pioneering or Basic Research Laboratories

at:

Albany, California
Beltsville, Maryland
Lafayette, Indiana
New Orleans, Louisiana
Olustee and Winter Park, Florida
Peoria, Illinois
Philadelphia, Pennsylvania
Plum Island, New York
Washington, D. C.

AIR FORCE SYSTEMS COMMAND AND OFFICE
OF AEROSPACE RESEARCH

at:

Alamogordo, New Mexico
Albuquerque, New Mexico
Bedford, Massachusetts
Dayton, Ohio
Fairbanks, Alaska
Rome, New York
San Antonio, Texas

NATIONAL BUREAU OF STANDARDS

at:

Boulder, Colorado
Washington, D. C.

NAVAL ORDNANCE LABORATORY

at:

White Oak, Maryland
Silver Spring, Maryland

NAVAL WEAPONS LABORATORY

Dahlgren, Virginia

NAVY ELECTRONICS LABORATORY

Washington, D. C.

NAVAL ELECTRONICS LABORATORY

San Diego, California

NAVAL RESEARCH LABORATORY

Washington, D. C.

U. S. ARMY BIOLOGICAL LABORATORIES

Fort Detrick, Frederick, Maryland

U.S. WEATHER BUREAU

at:

Asheville, North Carolina
Cincinnati, Ohio
Idaho Falls, Idaho
Las Vegas, Nevada
Miami, Florida
Oak Ridge, Tennessee
Suitland, Maryland
Washington, D. C.

FULBRIGHT LECTURESHIPS still open as of November 5:

<u>Field</u>	<u>Country</u>
American and English Literature	Syria
Architecture	Turkey
Area Studies	Turkey
Biology and Agriculture	
Biochemistry	Afghanistan
Biology	Republic of China
Dairy Technology	Ireland
Crop Climatology	Malaysia
Marine Biology	Turkey
Toxicology	United Arab Republic

Chemistry	
Radiochemistry	India
Any field of chemistry	Nepal
Analytic Chemistry	United Arab Republic
Inorganic Chemistry	United Arab Republic
Economics	
Econometrics	India
Business Administration	Iraq
Industrial Management	Malaysia
Any field of economics	Nepal
Any field of economics	Pakistan
Statistics	United Arab Republic
Education	
Guidance or College Admissions	India
Physical Education	Iraq
Curriculum Design, Supervision & Adm.	Philippines
Engineering	
Petroleum and Reservoir Engr.	Iraq
1. Structural Analysis & Reinforced Concrete;	Iraq (Lectureship in one of
2. Structural Design and Reinforced Concrete;	the three courses mentioned)
3. Sanitary Engineering, Transportation, Hydrology.	
Mechanical Engineering	Syria
Aeronautical Engineering	United Arab Republic
Civil Engineering	United Arab Republic
Electrical Engineering	United Arab Republic
Mining Engineering	United Arab Republic
English as a Foreign Language; Linguistics	
English as a foreign language	Iran
English as a foreign language	Iraq
Scientific English	Thailand
History	
Indian Subcontinent and/or Middle East	Nepal
Mathematics	
Lectureship in mathematics; instructions will	
be given in English	Republic of China
Lectureship in mathematics	Iraq
Lectureship in mathematics	Malaysia
Mathematics & Statistics	Ruanda
Statistics and conduct; an In-Service Training	
Project	Thailand
Lectureship in mathematics (operations research)	Turkey
Physics	
Lectureship in theoretical physics, quantum mechanics,	
and solid state physics (undergraduate level)	Republic of China
Lectureship in theoretical physics	United Arab Republic
Political Science	
Lectureship in public administration	India
Lectureship in international relations	Pakistan
Lectureship in public administration	Union of South Africa
American Literature	
Lectures may be given in English	Brazil (U. of Brazil)
Lectures may be given in English but knowledge of	
Portuguese would be helpful	Brazil (U. of Parana)

Anthropology	
Cultural anthropology	Peru (U. of Cuzco)
Cultural anthropology	Peru (U. of Huancayo)
Biology and Agriculture	
Biochemistry	Brazil (U. of Bahia)
Biology	Chile (U. of Chile)
Chemistry	
Analytical application of radio-chemistry techniques	Argentina
Physical Chemistry	Peru
Economics	
Economics	Bolivia
Regional development and planning	Chile
Economics	Guatemala
One or more of the following: Financial planning and budget analysis; formulations and evaluation of economic development projects; personnel and labor relations; formulation of trade policy; econometrics; problems of management.	Peru
Education	
Audio-visual aids	Peru
Educational planning	Peru
Vocational rehabilitation of young adults. Spanish helpful, but not essential.	Peru
Engineering	
Chemical Engineering	Argentina
Engineering	Bolivia
Mechanized agriculture	Ecuador
Highway engineering	Ecuador
Mining engineering or chemical engineering	Peru (Alternate)
Chemical engineering	Peru (Requests)
Library Science	
Library administration, lecturer/consultant	Peru
Journalism	
Introductory journalism	El Salvador
Journalism	Nicaragua
Law	
Anglo-Saxon or comparative law	Chile
Comparative law	Uruguay
Mathematics	
Mathematics	Bolivia
Physics	
One or possibly two awards in solid state physics	Brazil
Political Science	
Public administration	Uruguay
Psychology	
Industrial psychology	Argentina
Social psychology, industrial psychology, psychology of juvenile delinquency, <u>or</u> clinical psychology.	Peru
Sociology and Social Work	
Methods and techniques of social research	Argentina
Lectures in any or several of the following: Social theory, social anthropology, rural sociology, or industrial sociology	Chile
Statistical methods of social research	Colombia (Bogota)

Social work, preference has been expressed for a lecturer in community organization and community development.	Colombia (Cali)
Organization and administration of social work	Uruguay
Teaching of English as a Foreign Language & Linguistics	
Methodology of teaching English as a foreign language	Argentina
TEFL. A good knowledge of Portuguese would be helpful, but is not essential.	Brazil
A project for improving English language instruction in the universities and in the teacher-training schools.	Colombia
Spanish linguistics	Colombia
Two lecturers in TEFL to continue the program for the improvement of English instruction on the university level and in the teacher-training schools.	Ecuador
Four junior-level lecturers, preferably in basic sciences, both physical and natural, but social scientists acceptable. Housing difficulties, therefore, preference will be given to single persons.	Dominican Republic

FULBRIGHT SUMMER INSTITUTES in Indian Civilization (Universities of Mysore and New Delhi), Egyptian Civilization (Cairo), and for U. S. College Teachers of French (Paris and Pau), are offered for 20-25 undergraduate teachers, preferably holding the Ph.D. degree. Application deadline is December 20.

CLEMSON IS 15-YEAR, \$204.2 MILLION BUSINESS

Since January 1, 1950, the total expenditures for all units of Clemson University--academic program, agricultural extension, experiment station, livestock-poultry health, and fertilizer analysis--amounted to \$204.2 million. The academic unit only represented an expenditure of \$92.5 million over that period, a span in which student enrollment increased from 2,800 to 4,588 and the faculty went from 255 to 270.

The nearly six million dollars in construction now under way on the campus brings the amount of building construction and equipment expenditures over the 15 years to \$35.7 million. Construction now in progress includes the library, a men's residence hall to house 148 students, a women's dormitory to house 144, and additions to service facilities.

Of the \$35.7 million, approximately 8% (\$2.5 million) was provided by direct state appropriations and 92% (\$30 million) was financed by tuition and revenue bonds, and gifts to the University. Gifts included the \$1.9 million from the Olin Foundation for building and equipping the ceramic and chemical engineering halls

MINUTES: THE FACULTY SENATE OF CLEMSON UNIVERSITY

The Faculty Senate held its 101st meeting in Room I of the Physics Building at 4 p.m., November 10, 1964. President John E. Miller called the meeting to order, and requested reports from the chairmen of the Senate standing committees.

George Means, chairman of the Policy Committee, announced that his committee is now investigating the recommendation that the University purchase busses for field trips. He also said that the other matter referred to this committee, the effects of the use of Plan A by faculty members, needed no action since a University policy is already in existence which covered this matter.

Next Dr. Shewfelt, chairman of the Welfare Committee, summarized the accomplishments of the work on chest x-rays. Of the 1,072 people examined, 1,050 showed no need for further examination, while the remaining 22 were scheduled for a recheck. The results of the x-rays were sent to only those persons needing a recheck.

He also reported that investigation of the health insurance programs revealed that we are now paying the lowest rate possible for the number of benefits received. As for the question of group life insurance, the law disqualified the University from using this plan since a group plan required employer contributions. The possibility of trying this plan and having the Alumni Association pay the employer's share was here raised. The University of South Carolina, it was stated, uses this method.

On the matter of traffic and parking, Dr. Shewfelt reported there is still need for provision of more parking facilities to make them equal to the number of cars on the campus, including those of the commuting students. A suggestion now being studied is that campus parking be a privilege limited to Juniors and Seniors, and to Sophomores with a certain minimum grade-point ratio.

Dr. Shewfelt then called on H. M. Felder to give the results of his investigation as to the feasibility of a University burial association. Mr. Felder gave an interesting account of his findings on burial costs in the Clemson area. He is going to investigate further the advantages of establishing a burial association.

The next committee chairman called on, Professor Ball, said that his Scholarship and Admissions Committee although working on several problems had nothing to report at this time.

Dr. Miller next made the following announcements:

(1) He has sent a letter of congratulations to Dr. Charles Townes, recent Nobel Prize winner, and holder of an honorary degree from Clemson, on behalf of the Academic Faculty; (2) the wording on the plaque for the Faculty Scholarship award has been approved by the Educational Council. Bids are now being sought by the Purchasing Office for the plaque; (3) he has attended a meeting of the Board of Trustees in Columbia; (4) the President of the Faculty Senate is to appear on the TV program, "Telescope", a program appearing from 9:30 to 10:00 a.m., December 3 on Channel 4, where he will explain the role played by the Faculty Senate in the total educational program at Clemson University; (5) a copy of the Senate's resolution in memory of Colonel Stritzinger was sent to Mrs. Stritzinger.

An amendment was then submitted to the Senate, signed by five members of the Academic Faculty to change the monthly meeting time of the Faculty Senate to 4:30 p.m. on the second Thursday each month. A lively discussion ensued. This amendment will be voted on at the next meeting of the Faculty Senate, pursuant to the by-laws of the Constitution.

Since there was no additional business, the meeting was then adjourned at 4:50 p.m.

INTEREST IN ENGINEERING AND SCIENCE DECLINING STUDY SHOWS.

Despite multimillion-dollar Federal support programs for research and education in engineering and science, interest in these areas is declining as a field of study elected by Merit Scholar semifinalists, a recent study by Robert C. Nichols of the staff of the National Merit Scholarships Corporation shows.

Since 1958, the year Sputnik I was launched, the percentage of Merit Scholar semifinalists choosing "scientific research" as a career dropped from 38 for men and 23 for women to 29 for men and 19 for women in 1963. In engineering, the decline is from 34 per cent for men and 3 per cent for women to 20 per cent of the men and 1 per cent for women. Among the sciences, the greatest decline was in physics, where the drop was from 19 per cent for men and 4 per cent for women in 1958 to 12 per cent for men and less than 3 per cent for women in 1963.

The percentages electing biology and mathematics increased during this period. In mathematics, the percentages increased from 8 for the men and 11 of women in 1958 to 16 for men and 18 for the women in 1963. In biology, the increases were from 1 and 3 per cent for men and women in 1958 to 3 and 7 per cent in 1963.

A career in teaching has become more popular for both men and women, with increases from 8 to 15 per cent for the men and from 37 to 40 per cent for women. Social sciences and the humanities showed increases of from 13 to 19 per cent for the men and from 27 to 34 per cent of the women. Interest in medicine has also increased, from 9 to 12 per cent for men and women in 1958 to 12 and 13 per cent in 1963.

Reprints of Dr. Nichols' paper on his study are available from the Research Division, National Merit Scholarship Corporation, 990 Groave Street, Evanston, Illinois 60201.

S.C.S.E.A. MEMBERSHIP DRIVE

The Clemson University members of the South Carolina State Employees Association Board of Directors call attention to the current membership drive December 1-31. The S.C.S.E.A. is the recognized voice of all state employees. To remain in its authoritative position, the Association needs the support (through membership) of every Clemson employee. Membership applications can be obtained by contacting one of the following board members: John B. Gentry, Robert A. Banister, or Thomas D. Efland. Complete information about the Association and its benefits can be obtained from the Personnel Office, Extension 365.

PERSONAL MENTION

O. B. Garrison (Exp Sta) served as chairman of the Southern Experiment Station Directors at the Atlanta meeting of the group, November 19-20.

A. H. Holt (Engl) has been awarded a fellowship for the summer, 1965, session of the Southeast Institute of Medieval and Renaissance Studies at the University of North Carolina.

Gordon Gourlay (Library) has been appointed an ex officio member of the University curriculum committee and graduate council.

J. W. Jones (Ag) was a member of the Southern Association of Colleges and Schools Committee which visited Abraham Baldwin Agricultural College in Tifton, Georgia, November 15-18.

W. C. Whitten, Jr., (Eco) read a paper "On the Economic and Social Ideas of Thomas Cooper," at the Southern Economic Association meeting at Atlanta, November 13.

Sue Brown (Eco & Govt) participated on a panel: "Business Law Courses; Effective Examinations," at the meetings of the South Atlantic Business Law Association, November 13-14.

GIFTS AND GRANTS

The following gifts and grants have been reported since the November 15 issue of the Newsletter:

From Sears, Roebuck and Co., a microfilm copy of all Sears catalogs published since 1888.

From the Mead Corporation, \$100 to the Graduate School.

From the National Science Foundation, \$57,390 to F. I. Brownley (Chem) for a summer institute for secondary school science teachers.

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C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 4 No. 8

December 15, 1964

CALENDAR: December 17-January 17

- Dec. 17 Th Sherman Harris (Counsel, Anti-Defamation League of B'nai-B'rith) will speak at open meeting of AAUP. 4 p.m. and 8 p.m., Chemistry Auditorium.
- Dec. 17-29 Exhibition: Leonard Baskin Prints. Woodcuts, wood-engravings, and etchings by one of America's foremost artists, Leonard Baskin. Sculptor, print-maker, and book publisher, Baskin establishes and reinforces his fine reputation with this exhibition of thirty original prints. Lee Gallery, Architecture.
- Dec. 17-18 Hans Sagan (N.C. State) will lecture at 4 p.m., Thursday on "The Sturm-Liouville Problem"; at 7 p.m. Thursday on "A New Look at the Calculations of Variations-Dynamic Programming"; and at 11 a.m. Friday on "Approximate Methods From the Functional Analytic Standpoint." All lectures in Room 101, Physics Building.
- Dec. 19 S Students leave for Christmas holidays.
- Dec. 28-29 Basketball: Poinsettia tournament at Greenville (Clemson, Auburn, Furman, Baylor).
- Jan. 4 M Classes resume.
- Jan. 5 T W. Stanley Finch (Director of Public Relations, Texize) will speak on "The Importance of Clear Communication." 11 a.m., Sirrine Auditorium.
- Jan. 5 T Sage Club. 6:30 p.m., Clemson House.
- Jan. 5 T Basketball: Clemson v. Furman.
- Jan. 6 W Laicos, 8:15 p.m., Clemson House.
- Jan. 6 W Newcomers, 8:00 p.m., Clemson House.
- Jan. 6 W Arts and Crafts group of Newcomers' Club will meet regularly at the YMCA at 8 p.m.

- Jan. 7 Th Movie: "The Mouse That Roared." 7 and 9 p.m., Civil Engineering Auditorium.
- Jan. 7 Th Woman's Club. 3:30 p.m., Clemson House.
- Jan. 8 F Basketball: Clemson v. Maryland.
- Jan. 9 S Basketball: Clemson v. Virginia.
- Jan. 11 M Forum Club, 7 p.m., 205 Chemistry Building. J. E. Miller will speak.
- Jan. 12 T Hugh Bunting (Chairman of Agricultural Botany, Reading University, Berks, England) will lecture on "World Food Problems," 8 p.m., Room 101, Physics Building.
- Jan. 12 T The Gourmet Interest Group of the Newcomers' Club will hear a discussion on cake decorating, led by Mrs. J. P. Fulmer. Mary Moore and Peg Sack are hostesses and the group will meet at Mrs. Moore's home, 214 Holly Avenue.
- Jan. 13 W Graduate Wives, 8 p.m., Clemson House.
- Jan. 14-Feb. 5 Exhibition: School of Architecture Student Work. A combined exhibition of the current work from all design levels in the School of Architecture. Work from the Visual Arts classes will also be included in this mid-year exhibition.

ADDITION TO CIVIL ENGINEERING FACULTY

Alfred Thomas Wallace of Cranford, New Jersey, and Madison, Wisconsin, will join the Civil Engineering faculty next semester as an Assistant Professor.

He has the B.S. degree from Rutgers and the M.S. and Ph.D. degrees from Wisconsin. His teaching experience includes two and one-half years at Wisconsin and two years at Purdue. Additionally, he has worked two years as a chemical engineer with the American Oil Company. His research interest is in water pollution and water problems.

Dr. Wallace is a member of Tau Beta Pi and Sigma Xi. He is married and has three children.

1965 HOME FOOTBALL SCHEDULE ANNOUNCED

The 1965 home football schedule has been announced by Dean Walter Cox. The schedule is:

September 18	N. C. State	(Band Day)
October 23	T. C. U.	(Homecoming)
October 30	Wake Forest	(Youth Day)
November 13	Maryland	(IPTAY and Dad's Day)

LAND-GRANT ASSOCIATION ELECTS NEW OFFICERS, CHANGES NAME

President David D. Henry of the University of Illinois was elected President of the Association of State Universities and Land-Grant Colleges at its 78th annual meeting in Washington in November. During the same meeting the Senate voted unanimously to change the name of the Association to that of the National Association of State Universities and Land-Grant Colleges, thus reflecting in the name the historical origins of the present organization, combining the Association of State Universities and Land-Grant Colleges (1887) and the National Association of State Universities (1895) -- the two oldest organizations of higher educational institutions on the American scene. The change will become effective January 3, 1965, to permit orderly change of the many fiscal records involved.

The Chairman of the Council of Presidents is George W. Starcher of the University of North Dakota. Succeeding him as secretary of the Council is President D. W. Colvard of Mississippi State University.

President Elmer Ellis, University of Missouri, immediate Past President of the Association, will serve as Chairman of the Executive Committee during the coming year.

CLEMSON ON WFBC-TV

At the invitation of Television Station WFBC-TV (Channel 4), Greenville, Clemson staff members have "taken" over the station's Tele-Scope program on Thursday mornings. President Edwards, Dr. Claud Green, Dr. Hugh Macaulay, Dr. John Miller, and Dr. Wright Bryan appeared on the interview program in November and early December. Because of Christmas shows, the Clemson appearances have been cancelled for the Dec. 17 and Dec. 24 dates. The "every Thursday" schedule will be resumed after the Christmas holidays. These are interview programs conducted by WFBC-TV staff members and directed to the professional areas of the Clemson staff members. Program time is 9:40 a.m. to 10 a.m.

The Clemson guests for the 10-week period beginning the last day of December are:

Dec. 31	Dean Walter Cox
Jan. 7	Dean Wallace Trevillian
Jan. 14	Dean Jack K. Williams
Jan. 21	Dean Linvil G. Rich
Jan. 28	Dean William Wiley
Feb. 4	Dean Howard Hunter
Feb. 11	Mr. A. M. Bloss
Feb. 18	Mr. Stan Nicholas
Feb. 25	Mr. Kenneth Vickery
Mar. 4	Mr. M. A. Wilson
Mar. 11	Dean Harlan McClure

COLLEGE ENROLLMENTS EXCEED 5 MILLION, FRESHMEN UP 17 PERCENT.

U. S. Office of Education reports that college and university enrollments last fall exceeded the 5 million mark for the first time, though degree-credit students numbered 4,988,000. An additional 332,400 are enrolled in special 1 to 3-year terminal programs.

Total degree-credit enrollment of men students was up 9.4 percent over a year ago, and of women 11.3 percent. On a full-time basis, increases were 10.8 percent and 12.3 percent. Increases of total degree enrollments in public institutions were up 11.6 percent on a total basis, and 13.2 percent on a full-time basis, and in private institutions 7.6 percent and 8.4 percent, respectively. Most striking jump, of course, was in first-time students, where male enrollment increased 16.1 percent, that of women 18.5 percent, total 17 percent (as compared to an average of 7 percent in recent years).

Since the fall of 1961 degree-credit enrollment has increased nearly 26 percent for men, 36.3 percent for women (full time, 23.3 and 30.5). Enrollment in public institutions has gone up 36.3 percent since 1961, in private institutions 15.8 percent.

In non-degree-credit programs public enrollments increased 32.6 percent from 1963 to 1964, and dropped in private institutions by 19.1 percent.

All states except Alaska and Maryland showed increases in degree credit students in the fall of 1964 over that of the fall of 1963. They were fairly uniform in the various regions of the country, the national average being 10.1 percent, and regional averages running 10.7 percent in New England; 9.2 percent in the Mideast; 11.6, Great Lakes and Plains; 11.8, Southeast; 12, Southwest; 12.7, Rocky Mountain; 6.4, Far West. By states Arkansas had the greatest percentage increase, followed by Nevada and New Mexico.

National average increase in first time entering students was 17 percent. By states and regions it varied widely: New England 14.6; Mideast 21; Great Lakes 18.7; Plains 20.5; Southeast 22.8; Southwest 19.4; Rocky Mountain 17.2; Far West 5 percent. Georgia topped the list with a whopping 40.4 percent increase; followed by Arizona with 34.2; Kentucky, 33.8; West Virginia, 30.7; and New Hampshire, 30.2. At the other end of the scale Nevada, Hawaii, and Maine showed a drop in first-time entrants. Alaska, which decreased in total degree-credit enrollment, had a 22.8 increase in freshman students; and Maryland a 12.9 percent freshman increase as compared to a slight over-all loss. (All are state, not institutional, figures.)

STUDY SHOWS ANNUAL DOCTORATE DEGREE DEFICIT OF 9,500 FOR DECADE

According to the recent study by John L. Chase, Chief of the Higher Education Personnel Section of the Office of Education, the United States faces an annual average deficit of faculty members with doctorate degrees of 9,500 during the next 10 years. The following table summarizes Dr. Chase's data, which consists of pulling together and refining the best information available from basic data from OE Earned Degree reports, staff projections by Dr. Kenneth A. Simon, and the OE survey "Status and Career Orientations of College Faculty, 1962-63."

The table is self-explanatory. Deficit figures in the last column are rounded to the nearest "0" for the obvious reasons that such projections can show only approximate orders of magnitude. Dr. Chase stresses, however, that the estimates are probably understated, since he worked with the concept of "full-time equivalents." The "other" or "miscellaneous" field is, quite simply, "catch-all" to which little significance can be attached.

	% of Total Faculties 1962-63	% With Doctorate 1962-63	% Entering Higher Education 1960-62	Average Annual Need 1963-74	Average Annual Supply 1963-74	Average Annual Deficit (Surplus) 1963-74
Social Sciences	12.3	66	81.7	4,435	1,719	2,720
Physical Sciences	8.6	75	46.6	3,524	1,533	1,990
Education	12.4	46	40.9	3,116	1,206	1,910
Biological Sciences	7.9	78	68.8	3,317	1,423	1,890
Eng. & Journ.	8.6	46	94.9	2,161	717	1,450
For. Lang. & Lit.	5.4	55	89.5	1,622	370	1,250
Mathematics	5.5	48	72.0	1,442	441	1,000
Fine Arts	9.7	26	82.1	1,378	398	980
Bus. & Com.	5.0	38	85.8	1,038	293	750
Psychology	2.8	82	47.8	1,254	576	680
Engineering	6.9	39	47.0	1,470	878	590
Philosophy	1.6	69	86.3	603	171	430
Health Fields	4.7	21	55.4	539	129	410
Agriculture	2.2	66	59.3	793	427	370
Religion & Theology	1.5	52	50.0	426	216	210
Home Economics	1.4	19	75.6	145	54	90
Law	1.0	18	77.8	98	42	60
Other	1.9	20	79.4	207	7,381	(7,270)

CONTINUING EDUCATION PROGRAM SET FOR TUESDAY, FEBRUARY 16 THROUGH MARCH 23

Mrs. Myra P. Bregger, Director of the Clemson Area Continuing Education Center, has announced a winter program which includes 46 different courses and involves at least 75 instructors.

Classes are held at Clemson from 7:30 p.m. to 9:30 p.m. on Tuesday evenings. The registration fee is \$6.00, and all persons over 18 years of age are invited to attend classes.

A copy of the program and other information may be obtained by writing the Director at P. O. Box 209, Clemson, or by calling 654-2139 or 654-2317.

Courses to be offered include: (1) S. C. History (2) the U. S. and the World Scene (3) Russian Civilization and the Soviet Union (4) "How to Think Straight" (5) "Psychology in the Aspirin Age" (6) Industrial Psychology (7) "Person-to-Person Communication" (8) Value Engineering (9) Computers in Our Lives (10) Critical Path Method of Construction Planning (10) Critical Path Method for Construction Planning (11) Your Legal Rights and Responsibilities (12) Federal and State Income Tax Law for Laymen (13) Money Management and Investment (14) Modern Mathematics for Parents (15) Current Books and Some Twentieth Century Authors (16) The Craft of Writing (17) Workshop in Public Speaking (18) Introductory Course in French Conversation (19) Introductory Course in Spanish Conversation (20) Horticulture for the Homeowner (21) The Home and Its Relation to the Community (22) Practical Decorating for Better Living (23) Cake Decorating for the Homemaker (24) Intermediate Dressmaking (25) Tailoring (26) Millinery (27) Charm--Poise--Wardrobing (28) Painting (29) Water Color (30) Enameling on Copper--Making Jewelry and Art Objects (31) "Let's Talk About Rocks"(32) General Woodworking for Beginners (33) Varied Flower Arrangements (34) Knitting for Beginners (35) Knitting for Beginners (36) Intermediate/Advanced Knitting (37) Norwegian Embroidery--Hardanger (38) Norwegian Embroidery--Hardanger (39) Aviation--Three Hour Session (40) Bridge for Beginners (41) Bridge for Beginners (42) Bridge for Intermediates (43) Figure Fitness Through Exercise for Women (44) Ballroom Dancing (45) Golf for Beginners (46) Improve Your Golf Game.

GRANTS AND GIFTS

From the Whitinsville Spinning Ring Company, to the School of IM-TS, a \$1,000 scholarship, to be awarded annually in memory of Mr. Stuart F. Brown.

From USDA, \$12,500 to the Pee Dee Station for research in soil and water.

From Dari-Tech Corporation, \$400 to Dairy Science for research in vacuum pasteurization.

From the U. S. Public Health Service to the Food Science and Biochemistry Department, a \$10,800 short-term training grant in support of a Short Course in Food Technology traineeships. The course is scheduled for February 22-26 and March 8-12, 1965. Dr. J. H. Mitchell, Jr., is Training Program Director.

From the S. C. Soil Conservation Committee, \$8,000 to Agronomy and Soils for acceleration of the soil survey program.

From NASA, six pre-doctoral study grants for students in space-related sciences. Each NASA fellow will receive a \$2,400 fellowship and Clemson will receive a cost-of-education allowance for each fellow.

PERSONAL MENTION

Charles C. Fain (Cer Engr) has been granted leave for a year beginning in January to do doctoral study at Ohio State University.

C. B. Green (English & Adm) has been elected to the Phi Beta Kappa Executive Committee for this district. Elected with Dr. Green was Malcolm Lester of Davidson College, Miss Mary Williams of Randolph-Macon, Charles Hounshell of Emory, and J. P. Brawner of West Virginia University.

T. V. Wilson (Ag Engr) has been awarded a National Science Foundation Faculty Science Fellowship to do graduate work toward a Ph.D. degree at North Carolina State.

J. K. Williams (Adm) has been elected a member of the Southern Association of Colleges and Schools' Commission on Colleges.

John W. Hubbard (Ag Econ) was elected Secretary of the Technical Committee for Regional Research Project S-42, "An Economic Appraisal of Farming Adjustment Opportunities in the Southern Region to Meet Changing Conditions," at the November meeting of the Committee at Texas A & M University.

W. J. Lanham (Ag Econ) presented a paper on "Socio-Economic Characteristics of South Carolina Rural Families," to the Extension Family Life Conference in Columbia on December 14.

A. J. Fear (English) has been informed that the Atlantic Coast Conference Debate Tournament will be held on the Clemson campus, February 12-13.

Greg Hughes (Placement) was chairman of a placement directors' group discussion hour at the annual meeting of the Southern College Placement Association held Dec. 9-11 in New Orleans.

E. M. Lander (History) is a contributor to the volume, The Deep South in Transformation: A Symposium, published by the University of Alabama Press.

J. H. Moore (CE) presented a paper on "Curing Methods" at the morning session of the Fourth Annual Quality Concrete Conference at the University of South Carolina on December 1.

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C L E M S O N

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

Newsletter

NOT FOR PUBLICATION

CALENDAR: JAN. 16-Feb. 4

- Jan. 16-Feb. 5 Exhibition: School of Architecture Student Work. A combined exhibition of the current work from all design levels in the School of Architecture. Work from the Visual Arts classes will be included in this mid-year exhibition.
- Jan. 19 T Research Faculty Council; regular meeting. Olin Hall.
- Jan. 19 T Fellowship Club, 6:30 p.m. Clemson House.
- Jan. 20 W Laicos Club, 8:15 p.m., Clemson House.
- Jan. 20 W Newcomers Club, 8 p.m., Clemson House--Bridge Group; 8 p.m., YMCA, Arts and Crafts Group; 8 p.m., Civil Engineering Auditorium, Gourmet Group.
- Jan. 21 Th Winthron Daughters Tea for Junior and Senior girls from Daniel and their mothers, 8 p.m., YMCA. Dr. and Mrs. Davis will be special guests.
- Jan. 22 F Academic Faculty Meeting. 3 p.m., Brackett Auditorium.
- Jan. 23 S Midyear graduation exercises. 3 p.m., Tillman Auditorium. Dr. J. M. Lesesne (President, Erskine College) will speak.
- Jan. 25 M Forum Club, 7 p.m. Chemistry Building Conference Room.
- Jan. 27-28 W,Th 2nd Semester registration for all students.
- Jan. 27 W Graduate Wives, 8 p.m., Clemson House.
- Jan. 29 F Classes begin, 2nd semester.
- Jan. 29 F Victor Olgyay (Princeton Professor of Architecture) will speak on "Climatology in Architectural Design." 3:30 p.m., Lee Gallery.
- Jan. 30 S Nicholas Morgenthaler (Architect, Bern, Switzerland) will speak on "New Housing in Switzerland." 3:30 p.m., Architecture Auditorium.
- Jan. 30 S Basketball: Clemson v. Univ. of So. Carolina.
- Jan. 30 S Swimming: Clemson v. Appalachian State College.
- Feb. 2-4 Religious Emphasis. Dr. Lacy Harwell, main speaker. Evenings--Tillman Hall Auditorium.
- Feb. 2 T Sage Club. 6:30 p.m., Clemson House.
- Feb. 4 Th Woman's Club, 3:30 p.m., Clemson House.

IM-TS School Announces Summer Schedule of Professional Development Courses

The School of Industrial Management-Textile Science has just announced its 1965 summer program of professional development courses. The 1965 program will be the eighth for the school. In 1964 students represented 39 job classifications, 62 industrial plants and 39 companies located in nine states, West Germany, and India.

Courses to be offered in 1965 include:

June 7 through 18:

P.D. 43--Basic Textile Chemistry

June 21 through 25:

P.D. 22--Introduction to Textile Manufacturing, Dyeing and Finishing

June 21 through July 2:

P.D. 25--Yarn Manufacturing

P.D. 38--Supervisor Development

P.D. 41--Methods Analysis and Time Study

P.D. 44--Advanced Textile Chemistry

July 12 through 23:

P.D. 25--Yarn Manufacturing (a repeat)

P.D. 41--Methods Analysis and Time Study (a repeat)

P.D. 47--Quality Control

P.D. 56--Weaving

P.D. 70--Graduate Seminar in Industrial Administration: A Survey of Literature and Developments Since 1960

Clemson to be Southern RR Flag Stop

D. W. Brosnan, President of the Southern Railway System, has announced that Clemson has been designated as a flag stop for Southern's passenger trains. Faculty and others who plan to board trains at Clemson should notify by phone the Southern superintendent or his chief dispatcher at Greenville, or the agent at the Clemson station.

Admissions Office Notes

Admissions and Registration has received scores from 3,914 students who took the College Board Examinations on December 5, 1964. This figure of 3,914 compares with 2,834 scores received from the December 1963 examination.

In 1963, 4,492 score reports were received from the entire 1962-1963 testing program and 5,789 were received from the 1963-64 program. Indications are that this year's total will exceed 7,000 reports.

When the student applies for the examination he may list three colleges to receive score reports without additional charge. Additional reports will be sent upon request to College Board and the payment of one dollar per report.

CURRICULUM COMMITTEE REPORT

The University Curriculum Committee has approved the following new programs and courses:

1. Doctoral programs in water resources engineering, environmental systems engineering, and engineering management. The first is a continuation of a masters program in the water resources field. The second is concerned with engineering aspects of the understanding, prediction and control of the environment of living organisms. The third is a program jointly administered by the School of Industrial Management-Textile Science and the College of Engineering.

2. New courses, as listed--

--EE 428, Communications Theory. 3 cr. (3,0).

Basic theory of information and its time domain and frequency domain interpretations of AM, FM, and pulse modulation techniques. Introduction to noise and statistical techniques in communications systems. Prerequisites: EE 316 and EE 320.

--CrEn 511, Ceramic Engineering Kinetics. 3 cr. (3,0).

Theory and measurement of the rates and mechanisms of reactions in ceramic processes.

--Bot 512, Organic Plant Metabolism. 3 cr. (3,0).

A consideration of respiration and photosynthesis; synthesis, translocation, storage, transformation and degradation of organic materials, fats, carbohydrates, proteins, pigments and enzymes. Prerequisites: Bot 352, Organic Chemistry. This course replaces Bot 501.

--Bot 513, Plant Growth and Development. 3 cr. (3, 0).

A consideration of vegetative and reproductive growth and development, from seed to maturity, flowering, fruiting and senescence. Dormancy and germination, photoperiodism and thermoperiodism, natural and synthetic growth regulators, and morphogenesis will also be covered. Prerequisites: Bot 352.

--Bot 514, Microbial Physiology. 3 cr. (3,0).

A detailed study of the growth of microorganisms and how they are affected by environment. Includes intermediary metabolism, enzyme kinetics, energy utilization, biological oxidation, adaptation, and biochemistry of amino acid transformations. The quantitative approach to research is emphasized. Prerequisites: Organic Chemistry, 1 yr; Biochemistry, 1 semester; Calculus, 1 semester; and Bact 401.

--Bot 691, Doctoral Research. Credit to be arranged

--For 501, Data Processing in Forestry Problems. 3 cr.(2,3).

Illustration, analysis and discussion of specific approaches used in forestry problems for handling, arranging and analyzing large volumes of field data.

--For 502, Dendrometry. 3 cr. (2,3).

Specialized sampling techniques and statistical methods required in forestry, compilation of timber volume tables, and forest survey problems. Prerequisites: Ex St 401 and For 302.

--For 503, Photo-Interpretation. 3 cr. (2,3)

Current methodology in aerial photo interpretation techniques, flight plans, taking and processing aerial photographs, and using aerial photographs in timber inventories and cruising. Prerequisites: Ex St 401 and For 301.

--For 504, Forest Economics. 3 cr. (2,3)

Examination and application of economic principles to forestry problems in the use of land, labor and capital. A study of the use of theory to problems of resource allocation and efficiency in forest management. Prerequisites: For 304 and 408 or equivalent.

--For 505, Cost Studies in Harvesting and Processing. 3 cr. (2,3).

An evaluation of selected cost studies in harvesting and processing problems. Major emphasis to be placed on the recognition, measurement, and analysis of the individual elements of cost which constitute total cost of an operation. Current problem data will be collected and analyzed and problem solutions will be presented in the form of written reports. Prerequisite: For 402.

--For 506, Multiple Use Management. 3 cr. (3,0)

A study of the interplay of economics and public relations in deciding the order of preference of various possible land uses, particularly with reference to privately owned forest lands. Prerequisites: For 407 and For 408.

--For 507, Special Problems in Forestry. 1-3 cr.

Special problems in forestry research, unrelated to a thesis, but designed for training in research methods.

--For 591, Research. 3 cr.

--For 592, Research. 3 cr.

--Gen 501, Cytogenetics. 3 cr. (2, 3).

A detailed study of the physical basis of genetic variation with emphasis on the co-relation of cytological and genetic concepts. Topics will include normal and abnormal chromosomal distribution, structural and numerical aberrations, interspecific hybridization, polyploidy and mutable genetic systems. Prerequisites: Bot 404 and Gen 302.

--IM 610, Seminar in Production Management. 2 cr. (2,0).

A seminar covering selected topics associated with current developments in areas relating to production management through readings, case studies and field trips.

--IM 611, Seminar in Decision. 2 cr. (2,0).

Research seminar in quantitative analysis and in management decision-making. Selected treatment of linear and non-linear programming, markov processes, Lagrange multipliers, game theory, difference and differential equations, transform methods, and modern decision theories. Review of technical literature; general discussion of the structure of decision process; dynamic modeling and simulation.

--IM 612, Seminar in Finance. 3 cr. (3,0).

Involves original research in the collection, analysis, and reporting of financial data as supplemented by published material. Evaluation of individual student projects in particular and financial problems in general is achieved through discussion. Prerequisite: IM 502.

--Nutr 591, Research. 3 cr.

--Nutr 592, Research. 3 cr.

Fellowships and Research Grants

The Graduate School has recently been notified of the following grants for further study and research. A file with complete information about each grant is available in the Graduate School office.

NSF Academic Year Institutes, Summer Institutes, and Summer Conferences for College Teachers have been announced. A list of institutions conducting these programs is available. Applications should be submitted to the institutions before February 15.

NDEA Fellowships for graduate study in a wide variety of fields have been awarded to institutions which in turn will seek qualified applicants. A list of these 1710 available fellowships is available in the Graduate School office.

Argonne National Laboratory Research Appointments are available to graduate students and faculty members for one semester or one year. Applications should be made 6-8 weeks before the beginning of the appointment.

New Fulbright Awards in Yugoslavia are available for graduate study and research as a result of a recent agreement signed between the U. S. and Yugoslavia. Students who are interested in graduate study should apply to The Institute of International Education, 809 United Nations Plaza, New York, New York 10017; research scholars should apply to The Committee on International Exchange of Persons, 2101 Constitution Avenue, N.W., Washington, D. C. 20418.

Soroptimist Fellowships for women are available for graduate work in fields of study concerned with one or more of the Soroptimist objectives: service to society; love of country; participation in public affairs; advancement of the status of women; and contribution to international understanding. The stipend is \$2000 and applications should be made before March 1.

MINUTES: THE FACULTY SENATE OF CLEMSON UNIVERSITY

The Faculty Senate held its one-hundred-and-second meeting in Room 1 of the Physics Building at 4:00 p.m., December 8, 1964, with President J. E. Miller presiding. The following committees gave reports:

Professor Ball, Chairman of the Admissions and Scholarship Committee, moved that the following proposal be adopted:

- A. That a recommended reading list for prospective students be prepared by Clemson University.
- B. That the said list be composed of two parts.
 - (1) A general reading list to broaden the background of potential students.
 - (2) A selected reading list for familiarizing potential students with the fields of study available at Clemson.

The Committee recommended that the lists of selected reading be prepared under the direction of the deans.

It was further recommended that the list, when prepared, be forwarded to the high schools of South Carolina and be enclosed with the first communication between the University and the prospective student.

The above proposals were all adopted by the Senate.

Professor Ball next stated that his committee has also prepared a recommended diploma form for the Ph.D. degree to be granted by Clemson University. A sample copy of this diploma will be brought to the January meeting of the Senate.

The next report was given by Professor Means of the Policy Committee. On checking the possibility of having the University purchase busses for use on field trips, etc., Mr. Means stated that the Motor Pool is continuing to do an excellent job of providing transportation for students and faculty as needed. It will augment the equipment with additional vehicles of varied sizes and kinds whenever these prove economical to add.

Professor Sullivan, the Faculty Senate representative on the Parking and Traffic Committee, announced that beginning with the first day of next semester the right-hand side of the road entering the Physics building parking lot is to be for employees only. This adds about nine more spaces for faculty parking.

There being no other committee reports, President Miller introduced as old business the amendment to the constitution introduced in November, for changing the time of Senate meetings to the second Thursday of each month at 4:15 p.m. The motion was passed. Copies of this change will now be prepared for voting by the entire body of the faculty.

President Miller then made two announcements.

1. He has received from Mrs. Frederick Stritzinger a letter of appreciation for the Senate Resolution on the death of Colonel Stritzinger.
2. He has received from the Chairman of the Faculty Welfare Committee of U.S.C. a request for the name of the corresponding representative of Clemson's faculty, in order to work out jointly a plan for free tuition

for the children of faculty of both the state universities and colleges.

There being no further business, the meeting was adjourned.

Respectfully submitted,

Patricia K. Hill, Secretary

Absent: L. H. Davis
J. L. Flatt

Minutes of the Research Faculty Council

The regular monthly meeting of the Research Faculty Council was called to order at 4:05 P.M., December 15, 1964, in Room 28, Tillman Hall, by the Chairman of the Council, P. E. Robbins.

Under Old Business there were the following reports:

1. Policy Committee--A. C. Elrod, chairman, presented a statement, previously submitted to council members, defining "research", and "testing". The statement reads,

"Research consists of any activity which is undertaken with the objectives of pushing back the frontiers of knowledge. It involves the diligent seeking after new facts and/or principles through investigation, inquiry, scrutiny, and examination. This includes the consideration of areas not previously investigated and the re-examination of basic concepts or principles for application to new processes. The term thus implies a degree of originality in the investigator's approach to a problem."

"Testing, on the other hand, is work in which no new elements are introduced. The results of testing answer the question, how much. For this work, the questions how and why have already been answered and are not involved in the work."

2. Personnel Relations Committee--Victor Hurst, reporting in the absence of the chairman, reported that to date, nine communications had been received relative to the committee's questioning of the Research Faculty in regard to matters that should be taken up by the Research Faculty Council.

3. Executive Committee--P. E. Robbins reported that work was continuing in the compiling of a university-wide survey of research projects.

4. There was no new business and the meeting adjourned at 4:40 p.m.

GRADUATE COUNCIL MINUTES

The Graduate Council met in Room 28, Tillman Hall, on December 15 at 2 p.m.

1. A proposal for an interdisciplinary program in Environmental Systems Engineering leading to the M.S. and Ph.D. degrees was considered and approved.

2. The Department of Industrial Management presented a proposal for an interdisciplinary program in Engineering Management which was discussed at length and approved.

3. The Council received as information a statement that the program in Water Resources Engineering would in the future increase the emphasis on quantitative aspects of water resources.

4. J. W. G. Gourlay, Librarian, emphasized the need for departments to prepare in advance lists of books and periodicals that would be needed when new graduate programs were adopted. In this way the Library might be able to budget for the purchase of these volumes and locate those books and back issues not currently in print.

5. Professor Hurst was asked to head a committee to review Graduate School policy governing the admission of Clemson extension employees to degree programs.

6. Three Industrial Management graduate courses were approved:

IM 610	Seminar in Production Management	2 (2,0)
IM 611	Seminar in Decision	2 (2,0)
IM 612	Seminar in Finance	2 (2,0)

7. The meeting adjourned at 3:45 p.m.

PLANT PATHOLOGIST ADDED TO EXPERIMENT STATION

Cyril W. Blackmon of Laurel, Maryland will join the faculty of the Edisto Experiment Station in February as an Assistant Professor in plant pathology. He has the B. S. degree from VPI, the M.S. from Trinity University, and the Ph.D. from Texas A & M.

In addition to high school teaching, Dr. Blackmon has had teaching experience at NE Louisiana State College. Currently he is plant pathologist with the pesticides regulation division at the U. S. Agricultural Research Center in Beltsville, Maryland.

He is a member of Sigma Xi and other professional associations, and is the author of ten research publications. He is married to the former Wilma Jean Miller of Marfa, Texas, and they have four children.

Addition to Math Faculty

Kenzo Seo of Hiroshima, Japan and Ft. Collins, Colorado will join the faculty in mathematics in August as an Associate Professor. He has the B.S. from Tokyo University and the M.S. and Ph.D. from Purdue. His major field is mathematical statistics and he has had five years of university teaching experience. Currently he is an Associate Professor at Colorado State University. He also worked for three years (1953-56) as a statistician with the Atom Bomb Casualty Commission in Hiroshima.

Dr. Seo is the author of a number of papers in mathematics. He is a member of the Institute of Mathematical Statistics, the Mathematical Association of America, the American Association for the Advancement of Science, and Sigma Xi. He is married and has three children.

Addition to Chemistry Faculty

George B. Savitsky of Davis, California, will join the chemistry faculty next September. Dr. Savitsky, a physical chemist, received his B.S. from Aurora University (French) in Shanghai, and his doctorate from the University of Florida. At Florida, he was both a duPont Teaching Fellow and a General Motors Research Fellow. Following two years post doctoral research at Princeton he joined the faculty at the University of California at Davis as an assistant professor. He is the author of a number of papers in major chemical journals. Dr. Savitsky belongs to Phi Beta Kappa, Phi Kappa Phi, Sigma Xi and A.A.A.S. He is married and has three children.

Additional Agricultural Engineer to Join Faculty

John Gilbert Alphin of Raleigh, N. C. will join the agricultural research faculty in March as an assistant professor. He will be located at the Pee Dee Station.

Mr. Alphin holds B.S. and M.S. degrees from N. C. State where he is a candidate for the doctorate. He is a member of Phi Kappa Phi and Sigma Xi and is currently working with the N. C. State Animal Disease Laboratory as a designer of automatic feeding equipment.

Mr. Alphin is married to the former Marguerite Register of Rose Hill, N. C. and they have two children.

Experiment Station Employs Statistician

Claud B. Loadholt of Fairfax, S. C. will join the staff of the Agricultural Experiment Station in February as an assistant statistician. He holds B.S. and M.S. degrees from Clemson where he was a member of Phi Kappa Phi, Phi Eta Sigma, and Alpha Zeta.

Mr. Loadholt is married to the former Elizabeth Patterson of Garnett, S. C.

Gifts and Grants

The gifts and grants described below have been received since the last Newsletter was printed:

- From NSF, \$9,210 to J. Halpin (Bot) to conduct a summer institute for superior high school students who are interested in biological sciences.
- From Mr. James F. Byrnes to the Library, a second gift of his public papers. The current gift includes a selection of Mr. Byrnes' Supreme Court papers.
- From Lockheed of Georgia to J. K. Johnson (ME), \$14,680 for research on "Investigation of Ejector Performance."
- From the National Science Foundation to A. R. Abernathy (CE), \$32,300 for support of research in "Microbiological Decomposition of Sulfonated Lignins."
- From the U. S. Army to Tah-teh Yang (ME), \$28,515 to renew a research program on "Splitter Effect in Conical Diffusers."
- From the DuPont Company to the Chemistry Department, \$2,000 for a graduate assistantship.
- From the DuPont Company to the Chemical Engineering Department, \$2,200 for unrestricted summer research.
- From the National Science Foundation to the Graduate School, \$19,240 for graduate traineeships in the mathematical, physical and engineering sciences.
- From American Cyanamid Company to IM-TS, \$500 in support of graduate programs.

PERSONAL MENTION

- W. H. Wiley (Ag) represented Clemson at the January 6-8 Atlanta meeting of the Southern Regional Education Board's Council on Graduate Education in the Agricultural Sciences.
- H. M. Cox (English) has been elected to a two-year term on the executive board of the South Atlantic Modern Language Association.
- W. T. Cox (Student Affairs) has accepted an invitation from the Southern Association of Colleges to be a member of the Self-Study Committee visiting East Kentucky State College in February.
- James F. Miles (Ag Econ) is author of "Marketing Co-op of Corporations" in the December 1964 issue of Broiler Industry Business Management Magazine. He was also elected to the Executive Committee of the Southern Regional Poultry Marketing Technical Committee at its recent annual meeting.
- The reorganization of the School of Industrial Management and Textile Science has resulted in title changes for eight teachers and researchers. The changes are:

PERSONAL MENTION - con't.

E. F. Cartee from Professor of Weaving and Designing to Professor of Textiles.

T. E. Efland from Professor of Knitting to Professor of Textiles.

D. R. Gentry from Assistant Textile Technologist to Assistant Professor of Textiles.

J. C. Hubbard from Associate Professor of Weaving to Associate Professor of Textiles.

J. H. Marvin from Associate Professor of Yarn Manufacturing to Associate Professor of Textiles.

W. E. Tarrant from Associate Professor of Weaving to Associate Professor of Textiles.

D. P. Thomson from Associate Professor of Yarn Manufacturing to Associate Professor of Textiles.

W. B. Williams from Associate Professor of Weaving and Designing to Associate Professor of Textiles.

--H. H. McGarity (Music) has moved his office and classroom from 20 Geology to 1 Geology.

--B. K. Webb (Ag Engr) has been granted a continuation of his leave to do doctoral study at N. C. State.

--John H. Butler (Dir. of Bands) has been elected Vice-President of the Southern Division of the College Band Directors National Association. He was elected to this office at a meeting held in Tempe, Arizona, in December, and will hold office until January of 1967.

--H. E. McClure (Archit) has taped a feature commentary on urban planning for use by the Southern Regional Education Board.

--T. V. Wilson (Ag Engr) has been awarded a National Science Foundation Faculty Fellowship for doctoral study at N. C. State.

--Four members of the Department of Civil Engineering, J. H. Moore, John Antrim, J. P. Rostron, and Arnold E. Schwartz, represented Clemson at the annual meeting of the Highway Research Board in Washington, January 11 through January 14.

--Everett Laitala (Ind. Engr.) represented the Clemson Sigma Xi Club as delegate to the annual convention of the Society of Sigma Xi held in Montreal, Canada on December 29, 1964.

--C. B. Green (English) and G. F. Meenaghan (ChE) will represent Clemson at the Area Honors Conference in Greensboro, February 5-6.

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C L E M S O N

Newsletter

NOT FOR PUBLICATION

CALENDAR: FEBRUARY 3-18

- Feb. 2 T Sage Club dinner meeting, 6:30 p.m., Clemson House. Mrs. R. F. Poole will speak.
- Feb. 3 W Newcomers, 8 p.m. Clemson House. Bridge.
- Feb. 3 W Laicos, 8:15 p.m., Clemson House.
- Feb. 3,4 W,Th Religious Emphasis lectures. 7 p.m., Tillman Auditorium.
- Feb. 4 Th Woman's Club, 3:30 p.m. Clemson House.
- Feb. 5 F Swimming: Clemson v. Wake Forest, 4 p.m.
- Feb. 6 S Basketball: Clemson v. N. C. State.
- Feb. 8 M Forum Club, 7 p.m., Chemistry Building Conference Room.
- Feb. 9 T Arthur H. Scouten (Univ. of Pa.) will speak on "Literary Forgeries." 4 p.m., Physics lecture room.
- Feb. 9 T Robert R. Gilruth (NASA--Houston) will speak on manned spacecraft. 7 p.m., Civil Engineering Auditorium.
- Feb. 9 T Melvin H. Knisely (S. C. Medical College) will speak on "Settling of Blood Cell Masses to Lower Sides of Vessels During Life." 7 p.m., Earle Hall Auditorium.
- Feb. 9 T A. H. Scouten (Univ. of Penn.) will address the University Chapter of AAUP. 8 p.m., Physics Auditorium. The AAUP will hold a business meeting following the address.
- Feb. 10 W Graduate Wives, 8 p.m., Clemson House.
- Feb. 11 Th J. J. Pinajian of the Oak Ridge National Lab. will lead a seminar on "Production of Radioisotopes at ORNL." 4 p.m. 118 Brackett Hall.
- Feb. 11-Mar 5 Exhibition at Lee Gallery, sponsored by the School of Architecture. Invitational Sculpture Show of the Carolinas: Approximately fifteen North Carolina and South Carolina sculptors will be represented in this invitational show. Each sculptor will personally select and exhibit two pieces of sculpture. This show will include all of the various materials and techniques that are being used by twentieth century sculptors. This includes the more traditional techniques such as bronze casting, wood carving, and stone carving as well as more recent techniques such as the welding of metals and the use of modern plastics.
- Feb. 12-13 F,S Atlantic Coast Conference Debate Tournament, Clemson House. Schedule of events printed elsewhere in this Newsletter.

Feb. 13	S	Swimming: Clemson v. Duke, 3 p.m.
Feb. 13	S	Modern Language exams for graduate students.
Feb. 16	T	Fellowship Club, 6:30 p.m., Clemson House.
Feb. 16	T	Basketball: Clemson v. Wake Forest.
Feb. 16	T	Regular meeting of the Research Faculty Council.
Feb. 17	W	Newcomers, 8 p.m., Clemson House.
Feb. 17	W	T. N. Gearreald (F. S. Royster Guano Co.) will speak on "Agricultural Chemicals." 4 p.m. P&AS Bldg. Auditorium.
Feb. 17	W	Laicos, 8:15 p.m., Clemson House.
Feb. 18	Th	Richard H. Jahns (Pa. State Univ.) will speak on "The Role of Water in Igneous Processes Beneath the Earth's Surface." <u>Sigma Xi lecture.</u> 7:30 p.m., Civil Engineering.

"EDUCATION" FEATURES PRESIDENT EDWARDS

An artist's sketch of President Robert C. Edwards was featured on the January cover of "Education" a national monthly journal published by The Bobbs-Merrill Company, Inc., in Indianapolis. Inside the magazine was the photograph from which the cover sketch was made and a thumbnail biography of President Edwards. "Education" is devoted to the science, philosophy and literature of education.

ALUMNI ASSOCIATION MAILING PERMITS

The Bulk Rate and second class postal permits used by the Clemson Alumni Association for mass mailings to alumni and parents can not be used by individuals to mail (or forward) a single piece of mail. When this is done, the piece is intercepted by the post office at Clemson and returned to the Alumni Office. It is a stipulation of the permit that the Alumni Office will bundle and route all such mail to its postal destination in bulk lots (never as individual pieces). In recent months there have been instances in which staff members have addressed envelopes bearing the Bulk Rate permit (or copies of The Alumni News carrying the second class permit or copies of This Is Clemson bearing the second class permit) to individuals. In all instances the pieces being mailed were returned to the Alumni Office and not remailed to the individual addressed. It is necessary to place such a piece of mail in an envelope and mail at the regular first class rate.

BINDING SERVICE FOR FACULTY MEMBERS

The Graduate School will be glad to arrange to bind theses and dissertations done by faculty members. The document will be sent with other theses and dissertations recently completed by Clemson graduate students and will be bound in the same black cover with gold lettering used on Clemson theses. The charge for each volume bound is \$3 which should be paid at the Bursar's Office and the receipt brought to the Graduate School office with the thesis to be bound.

SUMMARY OF CLEMSON ARCHIVES AND MANUSCRIPT HOLDINGS

(Mrs. Mary Stevenson of the library has prepared the following summary of Clemson Archives and manuscript holdings.)

January, 1965

I. Clemson University Official Records and Littlejohn History File

- (1) There are four 4-drawer vertical files, about 50 archives boxes and 25 additional feet of shelf space containing Clemson University records.
- (2) The J. C. Littlejohn File of Clemson University Historical materials. This file was collected by Mr. Littlejohn who was working on a history of Clemson. Mrs. R. R. Ritchie arranged and indexed the material. There are two 4-drawer vertical files and a table-height storage cabinet containing this material and the index. There are also a number of miscellaneous pictures (some in frames). Some of these were arranged and indexed by Mrs. Ritchie; other have been sent to the Library for safe-keeping.

II. Manuscript Collections Related to Clemson University but Containing Other Valuable Historical Papers

- (1) JOHN C. CALHOUN PAPERS, 1784-1888. 6 ft. (ca. 3000 items). Correspondence with more than 10 items each include John Strode Barbour, Kerr Boyce, Armistead Burt, F. Byrdsall, Mr. and Mrs. Thomas Green Clemson, John Ewing Colhoun (and other Calhouns and Colhouns), Henry William Connor, Lewis C. Coryell, R. K. Cralle, Charles Augustus Davis, Henry William DeSaussure, Andrew Jackson Donelson, William Pope Duval, Franklin Harper Elmore, Eastwick Evans, Ellwood Fisher, James Gadsden, Duff Green, James Hamilton, James Henry Hammond, John Hogan, William Hogan, John H. Howard, Robert M. T. Hunter, Alexander Hamilton Jones, Joseph W. Lesesne, Dixon Hall Lewis, Francis Lieber, Wilson Lumpkin, George McDuffie, Louis McLane, Sarah Mytton Maury, Virgil Maxcy, Francis Pickens Wilkinson, Eustis Prescott, Robert Barnwell Rhett, Joseph H. Scoville, Whitmarsh Benjamin Seabrook, H. M. Solomon, A. P. Stinson, John Tyler, Robert Walsh, Francis Wharton, Henry Wheaton and James Wishart.

Many of the letters have been published in the reports of the American Historical Association and, since these reports have been indexed, are available through these indexes. Most of the file has been microfilmed by the University of South Carolina Caroliniana Library. Calhoun's Papers are being published by the University of South Carolina Press (1959-).

This year, the library has xeroxed, bound and cataloged several copies each of the following from the collection: James Gadsden Letters, Robert Walsh Letters, Patrick Calhoun (Deputy Surveyor) Field Note Book, June 1784-1792. (We discovered and identified the last named in the files and sent one copy to the S. C. State Archives since they have the plats and other records of the land surveyed).

Manuscript Holdings, continued

VIII: Letters and Other Manuscripts of Well Known Authors, Scientists, Engineers

- (1) The most important of these is the Behrend Collection which contains not only Mr. Behrend's papers but also letters but also letters written to him by Mrs. Thomas Huxley and Husley photographs from members of the famous family. The collection contains single letters from other very famous persons. Also, in the Behrend Collection are a number of letters written by Julia Peterkin to Mrs. Behrend. Mr. Louis Henry (English) is now writing about Mrs. Peterkin and has collected numerous other Peterkin letters which he plans to add to our collection.
- (2) Henry William Ravenel's Correspondence With Botanists, 1841-1886. This collection has been indexed and an entry sent to the National Union Catalog of Manuscript Collections.
- (3) World War II Correspondent Ben Robertson's manuscripts and various other items. These have not been arranged or indexed.

IX. Very Old Newspapers, Pamphlets, Etc.

The pamphlets are part of the John C. Calhoun Papers. In some cases there are several copies of a pamphlet.

The newspapers include:

Keowee Courier, Vols. 1 & 2, May 18, 1849-May 17, 1861.

Pendleton Messenger - June 17, 1818 - May 19, 1819 (Bound)

April 3, 1833 - V. 26, No. 9
May 15, 1833 - V. 26, No. 15
Dec. 25, 1833 - V. 26, No. 47
Feb. 26, 1834 - V. 27, No. 4
March 26, 1834 - V. 27, No. 8
April 9, 1834 - V. 27
Oct. 1, 1834
July 31, 1835 - V. 28
August 7, 1835 - V. 28, No. 27
August 28, 1835 - V. 28, No. 30
Sept. 4, 1835 - V. 28, No. 31
Oct. 9, 1835 - V. 28, No. 36
Oct. 27, 1837 - V. 30, No. 39
1837 - V. 30, No. 41
Dec. 15, 1837 - V. 2, No. 46
Dec. 22, 1837 - V. 2, No. 47
Jan. 5, 1838 - V. 2, No. 49
Jan. 12, 1838 - V. 2, No. 50
Jan. 19, 1838 - V. 2, No. 51
Feb. 16, 1838 - V. 31, No. 3
Aug. 11, 1848 - V. 41, No. 29

Also 1843, Vol. 36, 1844, Vol. 37 and 1845, Vol. 38

South Carolina miscellaneous newspapers including some from Abbeville, Anderson, Camden, Charleston, Columbia, Edgefield, Georgetown and Sumter. (Note: The Library also owns a number of microfilm copies of old South Carolina newspapers).

Newspapers from Richmond, Washington and other places, dated in the 1830's.

Manuscript Holdings, continued

- (2) RICHARD KENNER CRAILLE CORRESPONDENCE, 1818-1856. (240 items). Crallé was a journalist who was associated with Calhoun for many years. This collection is said to be very valuable. Some of the correspondents are: William Segar Archer, Robert Young Hayne, James Alexander Seddon, Joseph Eggleston Seger and Abel Parker Upshur. The Library has a card index to the correspondents.
- (3) THOMAS GREEN CLEMSON PAPERS, 1854-1888. (2 ft., ca. 1000 items). Since Clemson was Calhoun's son-in-law this collection contains family correspondence and other interesting items. The collection has not been indexed. This year the Library xeroxed the following: Thomas Green Clemson's Scrapbook Containing His Published Letters and Speeches, 1855-1862; Letters Relating to - Thomas G. Clemson's Collection of Paintings.
- (4) Other smaller collections such as the Sikes Papers and the R. W. Simpson Papers.

III. Other Important Collections of the Papers of Statesmen

(1) THE JAMES F. BYRNES PAPERS

The Library has received part of this collection and is indexing them and placing them in acid-free folders and archives boxes. Currently the Library has 56 archives boxes and 3 vertical file drawers of papers.

(2) THE BENJAMIN R. TILLMAN PAPERS

These papers are in four large storage cabinets and two 4-drawer vertical files.

IV. Agricultural Society Minutes.

The Library has a collection of the records of a number of Nineteenth Century agricultural societies. These include the Grange (Patrons of Husbandry), Farmers Alliance, Pendleton Farmers Society and others.

V. Architectural Drawings of Local Buildings Made by Clemson Students, and Collections of Photographs of Local Homes Including Pendleton Farmers Society's Homes In and Around Pendleton, S. C. and Mr. J. W. Moore's Old Cokesbury.

VI. Other Old Pendleton Records.

Pendleton Social Library Society Minutes, 1828-1834; Pendleton County Court Minutes, 1780-1793 and Pendleton Sunday School Society 1819-1823. These are typed copies made by the WPA. There are other miscellaneous local records. For example, this year Mrs. Eula Brown Hart gave the Civil War Letters of her father, Elijah Webb Brown. Mr. Watson gave letters written by Manse Jolly, a famous Civil War character. There are numerous other small collection.

VII. Merchants Account Books

The Library has a number of these, collected from various places. Mr. Gaillard Hunter of Pendleton has just given the Library the Hunter Store account books.

DEBATE TOURNAMENT AT CLEMSON

The Calhoun Forensic Society of Clemson announces that the Atlantic Coast Conference Debate Tournament will be held at the Clemson House on February 12-13. Arthur J. Fear (English) is coach of the Clemson team.

Events scheduled for the two days are:

Friday, February 12, 1965

Registration, Clemson House	8:00-9:00 a.m.
Assembly	9:30 a.m.
First Round Debate	10:00-11:15 a.m.
Second Round Debate	11:30-12:45 p.m.
Drawing, Extemporaneous Speaking	12:30 p.m.
Coaches' Luncheon	12:45 p.m.
Extemporaneous Sepaking	1:45 p.m.
Third Round Debate	3:00- 4:15 p.m.
Fourth Round Debate	4:30- 5:45 p.m.
ACC Debate Banquet	7:00 p.m.

Saturday, February 13, 1965

Fifth Round Debate	9:00-10:15 a.m.
Sixth Round Debate	10:30-11:45 a.m.
Awards Luncheon and Finals, Extemporaneous Speaking	12:45 p.m.

Addition to Physics Faculty

Philip Barnes Burt of Memphis, Tennessee and Altadena, California joined the faculty in Physics on February 1 as an assistant professor. He has his bachelors and doctors degrees from the University of Tennessee, and has had four years experience as a college teacher. Additionally he has worked as an associate physicist at the Oak Ridge National Laboratory. Currently he is assistant professor at the University of Southern California. He is co-author of six printed research articles.

Dr. Burt is a member of Sigma Xi and the American Physical Society. He is married to the former Harriet Clack of Knoxville, Tennessee and they have three children.

Continuing Education Program Set for February 16 Through March 23: A Repeat Announcement

Mrs. Myra P. Bregger, Director of the Clemson Area Continuing Education Center, has announced a winter program which includes 46 different courses and involves at least 75 instructors.

Classes are held at Clemson from 7:30 p.m. to 9:30 p.m. on Tuesday evenings. The registration fee is \$6.00, and all persons over 18 years of age are invited to attend classes.

A copy of the program and other information may be obtained by writing the Director at P. O. Box 209, Clemson, or by calling 654-2139 or 654-2317.

Courses to be offered include: (1) S. C. History (2) the U. S. and the World Scene (3) Russian Civilization and the Soviet Union (4) "How to Think Straight" (5) "Psychology in the Aspirin Age" (6) Industrial Psychology (7) "Person-to-Person Communication" (8) Value Engineering (9) Computers in Our Lives (10) Critical Path Method of Construction Planning (11) Your Legal Rights and Responsibilities (12) Federal and State Income Tax Law for Laymen (13) Money Management and Investment (14) Modern Mathematics for Parents (15) Current Books and Some Twentieth Century Authors (16) The Craft of Writing (17) Workshop in Public Speaking (18) Introductory Course in French Conversation (19) Introductory Course in Spanish Conversation (20) Horticulture for the Homeowner (21) The Home and Its Relation to the Community (22) Practical Decorating for Better Living (23) Cake Decorating for the Homemaker (24) Intermediate Dressmaking (25) Tailoring (26) Millinery (27) Charm--Poise--Wardrobing (28) Painting (29) Water Color (30) Enameling on Copper--Making Jewelry and Art Objects (31) "Let's Talk About Knitting for Beginners (35) Knitting for Beginners (36) Intermediate/Advanced Knitting (37) Norwegian Embroidery--Hardanger (38) Norwegian Embroidery--Hardanger (39) Aviation---Three Hour Session (40) Bridge for Beginners (41) Bridge for Beginners (42) Bridge for Intermediates (43) Figure Fitness Through Exercise for Women (44) Ballroom Dancing (45) Golf for Beginners (46) Improve Your Golf Game.

Addition to Chemistry Faculty

George Boris Savitsky of Harbin, China and Davis, California will join the chemistry faculty in August as an associate professor. His B.S. degree is from Aurora University, his Ph.D. from the University of Florida.

Dr. Savitsky's work experience includes three years with the Jensen laboratory in Shanghai, six years with the United Fruit Company in Honduras and the Dominican Republic, and six years in teaching and research at Princeton and the University of California. Currently he is assistant professor at the latter university.

He is a member of Phi Beta Kappa, Phi Kappa Phi, Sigma Xi, Alpha Chi Sigma, and national professional chemical associations. He has published a number of research studies in chemistry.

Dr. Savitsky is married and has three children.

COLLEGE ENROLLMENTS EXCEED 5 MILLION, FRESHMEN UP 17 PER CENT.

U.S. Office of Education reports that college and university enrollments last fall exceeded the 5 million mark for the first time, though degree-credit students numbered 4,988,000. An additional 332,400 are enrolled in special 1 to 3 year terminal programs.

Total degree-credit enrollment of men students was up 9.4 per cent over a year ago, and of women 11.3 per cent. On a full-time basis, increases were 10.8 per cent and 12.3 per cent. Increases of total degree enrollments in public institutions were up 11.6 per cent on a total basis, and 13.2 per cent on a full-time basis, and in private institutions 7.6 per cent and 8.4 per cent, respectively. Most striking jump, of course, was in first time students, where male enrollment increased 16.1 per cent, that of women 18.5 per cent, total 17 per cent (as compared to an average of 7 per cent in recent years).

Since the fall of 1961 degree credit enrollment has increased nearly 26 per cent for men, 36.3 per cent for women (full time, 23.3 and 30.5). Enrollment in public institutions has gone up 36.3 per cent since 1961, in private institutions 15.8 per cent.

In non-degree-credit programs public enrollments increased 32.6 per cent from 1963 to 1964, and dropped in private institutions by 19.1 per cent.

All states except Alaska and Maryland showed increases in degree credit students in the fall of 1964 over that of the fall of 1963. They were fairly uniform in the various regions of the country, the national average being 10.1 per cent, and regional averages running 10.7 per cent in New England; 9.2 per cent in the Mideast; 11.6, Great Lakes and Plains; 11.8, Southeast; 12, Southwest; 12.7, Rocky Mountain; 6.4, Far West. By states Arkansas had the greatest percentage increase, followed by Nevada and New Mexico.

National average increase in first time entering students was 17 per cent. By states and regions it varied widely: New England 14.6; Mideast 21; Great Lakes 18.7; Plains 20.5; Southeast 22.8; Southwest 19.4; Rocky Mountain 17.2; Far West 5 per cent. Georgia topped the list with a whopping 40.4 per cent increase; followed by Arizona with 34.2; Kentucky, 33.8; West Virginia, 30.7; and New Hampshire, 30.2. At the other end of the scale Nevada, Hawaii, and Maine showed a drop in first-time entrants. Alaska, which decreased in total degree-credit enrollment, had a 22.8 increase in freshman students; and Maryland a 12.9 per cent freshman increase as compared to a slight over-all loss. (All are state, not institutional, figures.)

McCONNELL SEMINAR HOUSE AVAILABLE AT HIGH HAMPTON

The President of Davidson College has informed Clemson that the Robert Earle McConnell Foundation again this summer is offering the use of the Seminar House at High Hampton to educational institutions for faculty study groups, committee meetings, seminars, and other official purposes. The 1964 season is from mid-May to mid-October. High Hampton (Cashiers, N. C.) is about an hour's drive from Clemson.

The House has two twin bedrooms, two double bedrooms, a large living and study area, kitchen, and two small porches. With a total of six (twin-size) beds and two (double) beds, it can accommodate 8-10 guests by using the porches for sleeping and 6-8 guests without using the porches.

McCONNELL SEMINAR HOUSE AVAILABLE AT HIGH HAMPTON - con't.

The Foundation provides maid service, utilities, and meals which, except for breakfast at the Seminar House, are taken at High Hampton Inn, a short drive from the House.

Wives and husbands of participating members wishing to accompany their spouses will be expected to pay for their luncheon and dinner at the Inn. No charge will be made for non-participating wives or husbands staying at the Seminar House if the group is sufficiently small to permit this.

In addition to mountain scenery, there are two excellent golf courses nearby (Highlands and Sapphire) plus the High Hampton course. There are also tennis, swimming, and fishing facilities.

Reservations for Seminar House will be made in order of their receipt and no reservation will be accepted for a period longer than one week or for more than one week-end (Friday-Saturday-Sunday). In requesting reservations, please indicate the size and general purpose of your group together with alternate dates for your use of the House. All reservation requests should be made by way of the office of Dean of the University.

MODERN LANGUAGE FILM SERIES -- CHEMISTRY AUDITORIUM -- 7:00 & 9:00 P.M.

SECOND SEMESTER 1964-65

Feb. 1	M	CINDERELIA (Color). 80 minutes. The Bolshoi Ballet. Russian
Feb. 15	M	THE RED AND THE BLACK (Color). 137 minutes. French (This film will be shown at 6:30 & 9:15)
Mar. 1	M	YANCO. 85 minutes. 1964. Spanish
Mar. 15	M	THE BLUE ANGEL. 90 minutes. German
Mar. 25	Th	BALLAD OF A SOLDIER. 89 minutes. 1960. Russian
Apr. 5	M	CONFESS, DR. CORDA. 101 minutes. 1958. German
Apr. 26	M	THE MARRIAGE OF FIGARO. 105 minutes. (Color). 1963. French
May 3	M	LA VIOLETERA. 116 minutes. (No subtitles) Spanish (Resume of plot will be distributed at door)
May 13	M	SYMPHONIE PASTORALE. 105 minutes. French

Student Membership Cards -- \$1.00

Faculty & Staff Membership Cards -- \$3.00

All foreign language films have English subtitles except LA VIOLETERA.

GIFTS AND GRANTS

The following gifts and grants have been received since the last issue of the Newsletter was printed:

- From the National Science Foundation to the Graduate School, \$25,890 for graduate student traineeships.
- From the Ralston Purina Company to the College of Agriculture and Biological Sciences \$500 for an undergraduate scholarship.
- From the General Electric Foundation to the College of Engineering, \$2500 for unrestricted use in the educational program.
- From Troy H. Cribb and Sons, Inc. to Horticulture, \$700 for research on the marketing of freshly prepared freestone peaches.
- From the Shell Development Company to Entomology and Zoology, \$600 for field evaluations of pesticides.
- From the South Carolina Plant Food Educational Society to Agronomy, \$500 to support the publication of "Plant Science News."
- From Pickle Packers International, Inc. to Truck Experiment Station, \$400 for processing tests on pickle breeding lines and hybrids.
- From the National Institute of Health to Donald E. Turk (Poultry Sci.) \$21,780, for research entitled "Digestive Tract Disease and Nutrient Absorption."

PERSONAL MENTION

- A. E. Liebenrood (ext) will resign on February 28 as Georgetown County Agent and will enter private business.
- O. E. Baker, Jr. (L-P Health) has had his title changed from Veterinary Area Supervisor to Supervisor of Swine Disease Programs.
- J. K. Reed, T. R. Adkins, S. B. Hayes, A. S. Tombes, A. B. Ward, and E. W. King (ento) presented papers at the January 24-29 meeting of the SE section of the Entomological Society of America, held in Little Rock, Arkansas. J. K. Reed presided over a section of the meeting.
- J. F. Stephens (Poultry Sci) spoke on "Coccidiosis" to the S. C. Poultry Health Association at its January 20 meeting.
- Lecturers in Military Science have had their titles changed to assistant professor, effective January 15. Col. M. C. Brown (U.S. Army) and Lt. Col. D. R. Franklin (U.S. Air Force), heads of the two military departments, have had their ranks changed to Professor.
- J. C. Mullins (ChEngr) has been awarded a duPont summer research grant.
- Leonard Booker (State Teacher Trainer) has moved his office from the Geology Building to Room 200, Industrial Engineering.
- M. C. Brown (M.S.) has received word from Fort Lee, Virginia, that Douglas D. Richardson, a 1964 Clemson graduate (IM and Army commission) finished first in his class at the Army Quartermaster Officer Basic School.
- George Beinhart (research--USDA) has been appointed a lecturer in Botany and will teach a graduate course during the current semester.

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

February 15, 1965

Calendar: February 16-March 5

Feb. 16-Mar. 5

Exhibition at Lee Gallery, sponsored by the School of Architecture. Invitational Sculpture Show of the Carolinas: Approximately fifteen North Carolina and South Carolina sculptors will be represented in this invitational show. Each sculptor will personally select and exhibit two pieces of sculpture. This show will include all of the various materials and techniques that are being used by twentieth century sculptors. This includes the more traditional techniques such as bronze casting, wood carving, and stone carving as well as more recent techniques such as the welding of metals and the use of modern plastics.

Feb. 16	T	Basketball: Clemson vs. Wake Forest
Feb. 17	W	Laicos Club, Bridge, 8:15 p.m., Clemson House.
Feb. 17	W	Newcomers Club, Bridge, 8:00 p.m., Clemson House.
Feb. 18	Th	Richard H. Jahns (Pa. State Univ.) will speak on "The Role of Water in Igneous Processes Beneath the Earth's Surface." <u>Sigma Xi lecture.</u> 7:30 p.m., Civil Engineering.
Feb. 20	S	Swimming: Clemson vs. Univ. of South Carolina. 3 p.m.
Feb. 22	M	Concert: Richard Leibert, Organist. Field House, 8 p.m.
Feb. 22	M	Forum Club. H. E. Vogel will speak, 7 p.m., 205 Chem. Building.
Feb. 23	T	Talk by Mr. Francis E. Swain, U. S. Dept. of Interior, Bureau of Reclamation. 7 p.m., C. E. Auditorium.
Feb. 24	W	Graduate Wives, 8 p.m., Clemson House.
Feb. 24	W	Newcomers Club, Arts and Crafts, 8 p.m., YMCA.
Feb. 25	Th	Shakespearean Play by National Players. Exact time and place to be announced.
Feb. 25	Th	R. C. Kelly (Harvard Univ.) will speak on "Triquinacene." Room 118, Brackett Hall, 4 p.m.
Mar. 1	M	YANCO. 85 minutes. 1964 Modern Language Film in Spanish.
Mar. 2	T	Sage Club. Clemson House, 6 p.m. (Note change in time.)
Mar. 4	Th	M. M. Johnson (V.P., Brown-Forman Distillers) will speak on "The Executive of the Future." Sirrine Auditorium. 2 p.m.
Mar. 4	Th	Woman's Club, 3:30 p.m., Clemson House.

AREA ACTIVE PARTICIPANTS IN 1964 ALUMNI FUND

The following 189 alumni and friends living in the Clemson area participated in the accomplishment of the 1964 Alumni Fund by making gifts to the fund during the year. (Non-alumni donors hold Associate Membership in the Alumni Association.)

Alumni

Frank C. Anderson, Sr.
George Armstrong
Charles A. Arrington
George Aull
Robert Banister
Melvin Barnette
Joel Berly
Thomas Bethea, III
Dan Bickley
George Bonnette
Leonard Booker
William Bowen
Douglas Bradbury
James Brittain
John L. Brock
A. J. Brown
Wright Bryan
Robert Burley
Ralph Cain
James Casey
Robert Chaplin, Jr.
William R. Clayton
Bruce Cloaninger
Edward W. Cook
J. Clinton Cook
Herbert Cooper
J. Roy Cooper
Walter Cox
James Craig
Richard Crowther
Milton Crum, Jr.
Francis Dean
Joe Douthit
Leland O. Drew
Augustus DuRant
James Edwards
Robert C. Edwards
James Eleazer
Marvin C. Ellison
Alvon Elrod
William C. Elrod
William Epps
Charles Ferguson
Roy Ferree
Luther J. Fields
E. J. Freeman
Gaston Gage
Hugh M. Gambrell

Robert H. Garrison
Thomas E. Gioiosa
John Goodman
William Gray
Emery A. Gunnin
Judson Hair
Lucius C. Hamilton
Alexander Hammond
Thomas E. Hayden, Jr.
Bruce Mc. Heniford
Louis Henry
Baxter Hodges
Wylie Hogue, Jr.
William G. Hudson
Gregory Hughes
Daniel Hunt
William Hunter
Hugh Jameson
Frank Jervey
James Johnson, Jr.
Jess Jones
Bryan Keller
James W. Kelly
Willis King
John LaGrone
Charles Langdon
Joe Lanham
Evans LaRoche
William Latimer
Henry Lefort
C. E. Littlejohn, Sr.
Jim T. Long
Herman P. Lynn
Fred M. McConnell
Samuel McDowell
Jack McElveen
Banks McFadden
Davis McGregor
H. C. (Bill) McLellan
Lewis Malphrus
John Marshall
Campbell Martin
Richard Mattox
G. E. Metz
Thomas Millford
James Monroe
George Moore
Robert Moorman

Luke A. Nance, Jr.
Carl Nettles
Edward Olson
Norwood R. Page
Donald H. Petersen
Bennett Prichard
Nancy Reid
Sam Rhodes
John T. Roberts
Columbus Rochester
Roy Rochester
John Rodgers
Ernest Rogers, Jr.
Hilton V. Rogers
John T. Rogers
James H. Sams, Jr.
William Scaife
T. L. Senn
Edward H. Shanklin
Joseph Sherman
Cyril Shuler
Beverly N. Skardon
Hoke Sloan
Absalom Snell
Thomas Stewart
S. C. Stribling
Milford Sutherland
David C. Trimmier
Kenneth Vickery
J. V. Walters
W. H. Washington
David Watkins
David J. Watson
Hubert Webb
William Whitten, Jr.
John Wigington
Paul Williamon
Bratton Williams
John Williams
Samuel Williams
Robert E. Williamson
Eugene Willimon
Eugene Willimon, Jr.
Horace Willis
Samuel M. Willis
Betts Wilson
Virgil Wilson
Victor Wray

Non-Alumni

Clayton Aucoin
C. E. Bardsley
C. W. Bolen
Graydon W. Brandt
Brent Breedin
Floyd I. Brownley, Jr.
Marlin Bruner
S.J.L. Crouch (H)
Donald D. Curtis (H)
O. W. Deason
Robert L. Edwards
Thomas D. Efland
A. J. Fear
H. M. Felder, Jr.
John Gentry

Howard E. Glenn (H)
Ben E. Goodale (H)
Claud B. Green
Marie M. Grimes
James E. Halpin
Kenneth R. Helton
Trescott Hinton
Albert H. Holt
P. B. Holtzendorff, Jr.
Frank Howard
Howard L. Hunter
Victor Hurst
Jack Janzen
Everett Laitala
J. P. LaMaster

Charles M. McGee, Jr.
Hugh H. Macaulay, Jr.
Andrew C. Mathews
Betty Moorman
Albert M. Musser (H)
A. Wood Rigsby
Grace W. Schilletter
A. L. Shewfelt
Hooper C. Spurlock
Thomas A. White (H)
Jack K. Williams
James P. Winter
William H. Wiley
Milner B. Wilson, Jr.
Melford A. Wilson

MORRILL ACT VIEWED AS GREAT AID TO "CAUSE OF LIBERAL EDUCATION."

The story of how the first major U.S. effort for Federal legislation for specialized education also became "the most important piece of Federal legislation yet passed that has assisted the cause of liberal education" is told by Dr. William F. Zimmerman, assistant director of the Danforth Foundation, in the October, 1964, issue of Liberal Education, published by the Association of American Colleges.

In an article "The Morrill Act and Liberal Education" Dr. Zimmerman attempts to trace through the history of the inclusion in the Land-Grant Act of 1862 of the provision that, while emphasis should be on "agriculture and the mechanic arts" it should be "without excluding other scientific and classical studies," and the statement of general objective as "the liberal and practical education of the industrial classes in the several pursuits and professions of life."

For the inclusion of this emphasis on "liberal" as well as practical education, and the reference to "classical" studies, etc., Dr. Zimmerman gives primary credit to Jonathan Baldwin Turner of Illinois, who developed his idea of an "industrial university" in detail in an address in 1851. Without reopening the old controversy over the "credit" belonging respectively to Morrill and Turner, he reaches the conclusion that Morrill had read, heard, and was influenced by Turner's widely-disseminated ideas. This particular phraseology, he notes, was viewed with approval by President Buchanan (who vetoed the original act on constitutional grounds), but received virtually no attention in Congressional debate, except for an adverse comment by one Senator who said the inclusion of the reference to "liberal" education would be used as an excuse to defraud farmers of the kind of training they needed and to go on doing what other colleges were already doing. (Senator Morrill some years later took the view that the phrase "without excluding other scientific and classical studies" meant they must be included (otherwise they would be excluded).

FRANK JERVEY CHOSEN AS LIFETIME TRUSTEE

Frank Jervy of Clemson, one-time Clemson University vice president for development, is the school's newest lifetime trustee.

Board chairman Robert M. Cooper of Wisacky announced Friday that Jervy was chosen to succeed the late Charles E. Daniel, Greenville contractor.

Selection of Jervy was made by the six other lifetime trustees.

Jervy, a 1914 graduate of Clemson, was decorated for heroism during World War I. During World War II he received the "Exceptional Civilian Award" in recognition of his work with the U.S. Ordnance Corps. He served as the corps' chief engineer from 1942 until 1953.

Jervy was Clemson's vice president for development from 1959 through 1963.

Other lifetime trustees are State Sen. Edgar A. Brown of Barnwell, former Gov. James F. Byrnes, Winchester Smith of Williston, Robert R. Coker of Hartsville, James C. Self of Greenwood and Cooper.

There have been but 24 members of this self-sustaining group since appointment of the initial seven in Thomas Clemson's will of 1888.

The Clemson board also consists of six trustees elected by the S. C. General Assembly to four-year terms.

REPORT CONCERNING FACULTY SENATE MEETING

The one-hundred-and-third meeting of the Faculty Senate was held at 4:00 p.m., Tuesday, January 12, 1965. After calling the meeting to order, President John E. Miller asked for committee reports.

Professor Means gave the information that his Policy Committee had been requested to gather on possible conflicts of the proposed new Senate meeting time with the 1965-66 university schedule. He reported that meeting either on the second Thursday or the second Tuesday of each month will occasion a conflict in January and one in May.

After some discussion, the president requested that the Policy Committee study this matter further and make a recommendation at the February meeting of the Senate.

Next Professor Ball of the Admissions and Scholarship Committee reported that the proposed new form of the diploma for the Ph.D. degree is not yet ready. He also said that a study is being made of the later progress of students who start with a low grade-point ratio.

Dr. Miller then made several announcements:

1. He has received a letter from Dean Williams saying that action has been taken on the recent Senate recommendation for a suggested reading list for high school students applying for admission to Clemson.

2. The Senate has received a Christmas card from Dr. Charles Townes in Stockholm, thanking us for our congratulatory letter to him on his being named Nobel Laureate in Physics for 1964.

BOARD OF TRUSTEES ACTIONS

The Clemson Board met in Columbia on February 10, with ten of the twelve members present. Actions taken by the Board included:

- Approval of a proposal to discontinue "Farm and Home Week," replacing it with educational programs for farmers and others.
- Instruction to the administration to execute all required certificates of compliance with the Federal Civil Rights Act of 1964.
- Recommendation to the State related to the financing of the new library and the awarding of a construction contract (\$253,480) to Yeargin Construction Company to erect an internal combustion engines laboratory and renovate the IE Shop Building.
- Approval of the design for a Clemson University ring for women graduates.
- Instruction to the administration to request title to 573 acres of federal lands near the Myrtle Beach Air Force Base. The lands will be used for agricultural research.
- Approval of an administration request to continue the employment of Dr. Charles A. Reed (Physics) for twelve months past his normal retirement date of May 30, 1965.
- Approval of university plans to administer a two-year nursing curricula in cooperation with Anderson Hospital; and to establish a junior college at Sumter, when appropriate.
- Instruction to the administration to increase fees for out-of-state students at an appropriate time in accord with pending legislative action. The increase in fees will not exceed \$250, and other S. C. state supported colleges will make similar adjustments.
- Approval of an administrative request to employ Dr. Thurman Hardin as head of the Department of Mechanical Engineering. Biographical information on Dr. Hardin is elsewhere in the Newsletter.

MECHANICAL ENGINEERING DEPARTMENT HEAD EMPLOYED

Thurman Craig Hardin of Colbert, Alabama and Cookeville, Tennessee will become professor and head of the department of mechanical engineering June 1. He has the B.S. degree from the University of Tennessee, the M.S. from V.P.I., and the Ph.D. from Georgia Tech.

Dr. Hardin's teaching experience includes 4 years at the University of Tennessee where he was instructor and assistant professor; three years at Georgia Tech where he was lecturer; and eight years at Tennessee Polytechnic Institute where he is currently professor and department head. He has also had three years experience as a project engineer with the duPont Company and has been a consultant with the U. S. Navy research laboratory in Washington, D. C.

Dr. Hardin holds membership in a number of professional engineering societies and is a member also of Tau Beta Pi and Sigma Xi. He is married to the former Mary Mason of Niota, Tennessee, and they have two children.

S. MANER MARTIN PROFESSORSHIP ESTABLISHED IN MATHEMATICS

A business concern which desires no publicity about its gift, has established at Clemson the S. Maner Martin Professorship in mathematics. Effective in August, 1965, the award will carry a \$3,000 supplement to the professor's annual salary. The recipient of the professorship has not been named.

The award is named in honor of S. Maner ("Major") Martin who was an outstanding teacher at Clemson from September, 1898 until his retirement in June, 1948. He was head of the mathematics department from 1908 until his retirement. He died at Clemson December 17, 1959. He was respected and loved by thousands of Clemson students and alumni, and by all who knew him.

The recipient of the professorship will be designated as "S. Maner Martin Professor of Mathematics."

ANNUAL RE-WORK PERIOD - TRAVELERS INSURANCE GROUP

The annual re-work period for the Travelers Insurance Group will be March 1-31, 1965. Company representatives will be on campus during this period and will be available to explain the Travelers plans and coverage to any interested employee. Visits will be made to any department desiring such and at times most convenient to the respective departments.

Any present member desiring to make changes to fit individual needs may do so at this time. Employees presently enrolled and desiring no changes will be automatically continued and need not contact the representatives at this time. Anyone who desires to obtain this type of insurance coverage must make application during the first 31 days of employment, or during this re-work period.

If you wish to make an appointment with one of the representatives, you may do so by contacting W. J. Stamey, Personnel Division, Extension 365.

INTERNAL REVENUE DEDUCTIBILITY RULING FOR RESEARCH EXPENSES OF TEACHERS

Tax-deductibility of travel and related research expenses by university faculty members was recognized by an Internal Revenue ruling (63-275), published December 30, 1963. The ruling, in part, is as follows:

"...research expenses, including traveling expenses properly allocable thereto, incurred by a professor for the purpose of teaching, lecturing, and writing and publishing in his area of competence, as a means of carrying out the duties expected of him in his capacity as a professor and without expectation of profit apart from salary, represent ordinary and necessary business expenses incurred in that capacity and are, therefore, deductible under section 162 (a) of the Code....The responsibility rests with each professor to show that the amount claimed are reasonable in relation to the research performed and that the research is in his area of competence; that is, that the research is directly related to the general field in which the professor is performing services as an educator."

Gifts and Grants

The following gifts and grants have been announced since the February 1 issue of the Newsletter was printed:

- from the Department of Health, Education and Welfare, \$22,337 to H. F. Landrith (history and education) in support of a summer institute for teachers of history in secondary schools.
- From 84 donors to the library during the year, 65 reels of microfilm and 611 volumes.
- From a donor who wishes to remain anonymous for the present, \$20,000 to the Edgar Brown Educational Fund--a fund for special educational purposes, especially student assistance.
- From a donor who wishes to remain anonymous, a professorship in mathematics, valued at \$3,000 annually. This professorship will honor the late S. Maner "Major" Martin who taught at Clemson from 1898 through 1948. The recipient of the professorship (as yet unselected) will carry the title, "S. Maner Martin Professor of Mathematics."
- From the J. E. Sirrine Foundation, a professorship in Textile Chemistry, valued at \$4,000 annually. The recipient of the professorship (as yet unselected) will carry the title, "J. E. Sirrine Professor."
- From NIH, \$18,168 to J. F. Andrews (Civil Engr) for a continuation of his research on "Growth Characteristics of Methane Bacteria."
- From Alumni of the University, through the Alumni Office in 1964, \$124,759.76, of which \$45,439.23 went into the operation of the Alumni program; \$35,681.03 (as restricted gifts) went into loan funds, scholarship funds and other educational activities as directed by donors; and \$43,639.50 went (as unrestricted money) into the following programs:

ALUMNI R. F. POOLE SCHOLARSHIPS. The R. F. Poole Alumni Scholarship program was built to the \$10,000 level over a four-year period. Sixteen students are in this program that is administered by the University Honors and Awards Committee..... \$10,200.00

CLEMSON GRADUATE SCHOOL: Awarded to the Graduate School to assist its program of Graduate Education..... 10,000.00

FACULTY RESEARCH AND DEVELOPMENT: Awarded to aid faculty recruitment and to encourage and expand faculty basic research..... 10,000.00

ALUMNI PROFESSORSHIPS: Beginning with the 1962-63 academic year, two alumni professorships were established. A third was added in 1963. They are in areas where the Ph.D. degree is offered and amount to \$1,500 per professorship annually. 4,500.00

STUDENT GOVERNMENT: Awarded to the Clemson Student Government organization to be used in conducting the affairs of student government..... 1,000.00

Gifts and Grants - con't.

PERMANENT ENDOWMENT: A portion of each year's income is being used to help build Clemson's permanent endowment..... \$6,739.50

ALUMNI UNDERGRADUATE MEMORIAL SCHOLARSHIPS: This grant begins a much needed program of undergraduate scholarships that will enable Clemson to attract an increased number of better students..... 1,200.00

PERSONAL MENTION

--Fourteen papers were presented by faculty of the College of Agriculture and Biological Sciences at the February 1-3 meeting in Dallas of the Association of Southern Agricultural Workers. The Clemson papers, authors and readers were:

"Centralized Broiler Selling Cooperatives," J. F. Miles (Ag Ec); "Effect of Die Speed of Pelleting Rate for Coastal Bermuda Grass," T. V. Wilson (Ag Engr); "Relation of Lime and Pre-emergence Herbicides to Yields of Cotton and Weeds," Ken Savage (Agron); "An Isolate of Bacillus sp. Antagonistic to Certain Members of the Fungus Form-Family Dematiaceae in Culture," G. C. Kingsland (Bot); "The Effect of Irrigation and Ten Species of Soil Fungi on the Growth of White Clover in Field Bins," J. E. Halpin (Bot); "Extent of Replacing Sucrose with Corn Sweeteners in Dairy Chocolate Drink," presented by S. R. Storey, written by J. T. Lazar, Jr. (Dairy); "Effect of Links of Previous Dry Period, Month of Freshening, Age, Body Weight, and Length of Gestation of Milk and Fat Yields of Dairy Cattle," written by G. H. Carmichael, presented by C. D. Clawson (Dairy); "Sorghum Silage for Milking Cows," C. C. Brannon (Dairy); "A Comparison of Several Volumetric Weight Methods for Determination of Butterfat in Homogenized Milk, Ice cream, and Fluid Chocolate Products," presented by S. R. Storey, written by R. W. Henningson and S. R. Storey (Dairy); "Quality and Polyphenol Oxidase Activities of Greenhouse Lettuce as Influenced by Different Rates of Organic and Inorganic Materials," presented by G. E. Stembridge, written by E. T. Sims, J. A. Martin, T. L. Senn (Hort); "Effect of Certain Growth Regulators on the Maturity of Sullivan Alberta Peaches," presented by G. E. Stembridge, written by G. E. Stembridge and J. T. Garrett (Hort); "Influence of Micro-climatological and Other Factors Affecting Winter Injury to and Production of Container Grown Ornamentals," presented by J. P. Fulmer, written by R. G. Halfacre, J. P. Fulmer, A. J. Kish (Hort); "Landscape Planning and Development of the Clemson University Ornamental Research Area," Tom Woodham (Hort); "Temperature at Six Different Locations in the Fowl's Body as Affected by Ambient Temperature," presented by M. A. Boone, written by B. D. Barnett (Poultry).

U. S. Jones (Agron) served as president of the Agronomy section of the Dallas meeting.

--William Hare (Math) will do postdoctoral study this summer at Bowdoin College.

PERSONAL MENTION - con't.

- H. O. Vaigneur (Ag Engr) has resigned his Assistant Professorship at Clemson to accept employment as Associate Professor at Mississippi State.
- H. J. Sefick and G. E. Stembridge (Hort) were speakers at the 18th Annual session of the S. C. Peach Council, held at Greenville on January 26. R. J. Ferree (Hort) was on the program of the Peach Council's National Convention at Grand Rapids, Michigan, February 7-10.
- Joel L. Richardson (IM) is serving again this year as Executive Secretary of the Southern Textile Methods and Standards Association.
- Evans A. LaRoche (Tex) is serving again this year as Secretary of the Textile & Needle Trades Division of the American Society for Quality Control.
- David R. Gentry (TC) presented a paper at the 16th Annual Cotton Research Clinic held at Pinehurst, N. C., February 2-4.
- L. H. Davis (Ag Educ) will be Visiting Professor at New Mexico State during the month of July.
- C. B. Green (English) will serve as a member of the Southern Association team to visit the University of South Florida, February 28-March 3.
- W. F. Beckwith (Chem Engr) presented a paper at the February 10 Houston meeting of the American Institute of Chemical Engineers.
- L. G. Rich (Engr) presented a paper at the University of North Carolina before the School of Public Health on February 6.

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NOT FOR PUBLICATION

Vol. 4, No. 12

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

March 1, 1965

CALENDAR: MARCH 2-17

- Mar. 2 T Sage Club. Clemson House, 6 p.m. (Note change in time.)
- Mar. 2-5 Exhibition at Lee Gallery. Invitational Sculpture Show of the Carolinas: Approximately fifteen North Carolina and South Carolina sculptors will be represented in this invitational show.
- Mar. 3 W Laicos Club, 8:15 p.m., Clemson House.
- Mar. 3 W Newcomers, 8 p.m., Clemson House. Bridge group.
- Mar. 4 Th M. M. Johnson (V.P., Brown-Forman Distillers) will speak on "The Executive of the Future." Sirrine Auditorium. 2 p.m.
- Mar. 4 Th Woman's Club, 6-10 p.m., Clemson House in the Clemson Room. This will be an "Antique Show" and the public is cordially invited.
- Mar. 4-5 Th, F NSF-Society of Foresters Cooperative Seminar. Grant W. Sharpe (Univ. of Michigan) will conduct lectures on outdoor recreation. 10 a.m., 1:30 p.m., March 4; 10 a.m., March 5. Auditorium, P & AS Building.
- Mar. 8 M Forum Club, 7 p.m., Chemistry Building Conference Room. C. W. Bolen will be the speaker.
- Mar. 9 T Gourmet group of Newcomers will meet at the home of Dr. & Mrs. T. Yang, 25-B Barre Street. Dr. and Mrs. Yang will discuss Chinese cooking. 8 p.m.
- Mar. 9 T Regular meeting of Academic Faculty Senate. 4 p.m., Olin Hall.
- Mar. 10 W Concert: Boston Pops Orchestra with Arthur Fiedler. 8 p.m. Field House.
- Mar. 10 W Graduate Wives. 8 p.m., Clemson House. Bridge group.
- Mar. 11 Th J. J. Moran (Mjr., USA) will lecture on the Air Weather Service. 4 p.m., Tillman Chapel.
- Mar. 11 Th G. R. Lappin (Tenn. Eastman Corp) will lecture on "Antioxidants and Ultraviolet Stabilizers." 4 p.m., Room 118 Chemistry Bldg.
- Mar. 15 M Modern Language Movie, "The Blue Angel." German, 90 minutes. 7 and 9 p.m., Chemistry Auditorium.
- Mar. 15 M R. W. Lounsbury (Purdue) will lecture on "Problems of Lunar Geological Exploration." 7:30 p.m., 103 Geology Building.
- Mar. 15 M Fellowship Club, 6:30 p.m., Clemson House.
- Mar. 15-17 Exhibition at Lee Gallery: 8th Annual High School Art Show.

Calendar continued

Mar. 16	T	Regular meeting of Research Faculty Council. 4 p.m., Olin Hall.
Mar. 16	T	Gamma Sigma Delta luncheon. Noon, Food Industries Auditorium.
Mar. 16	T	D. R. H. Gourley (Univ. of Virginia) will speak on "Potassium exchange in skeletal muscle." <u>Sigma Xi and Biology Club lecture.</u> 7:30 p.m.; Earle Hall Auditorium.
Mar. 17	W	Laicos Club, 8:15 p.m., Clemson House. Bridge group.
Mar. 17	W	Newcomers, 8 p.m., Clemson House. Bridge group.
Mar. 17	W	Henry Margenau (Yale) will lecture on "Philosophical Perspective of Modern Science." 4 p.m., 101 Physics. At 8 p.m. in the same room, Dr. Margenau will speak on "The Meaning of Physical Reality."

GRADUATE COUNCIL MINUTES

At its meeting on January 20, the Graduate Council considered the following items of business.

1. The Council approved twenty-two candidates for master's degrees and four candidates for the Ph.D. degree.
2. Rules governing the eligibility of extension staff members to work toward graduate degrees at Clemson were modified slightly.
 - a. All Extension staff members except specialist leaders, supervisors, and administrators may, if otherwise qualified, be admitted to a master's degree program at Clemson.
 - b. All Extension staff members except assistant specialists, associate specialists, specialists, specialist leaders, and administrators may, if otherwise qualified, be admitted to a doctoral program at Clemson.
 - b. County agents, associate and assistant agents may, if otherwise qualified, be admitted to either degree program.
3. Research courses numbered 591 and 592 will be combined into one research course numbered 591 which may be taken for variable credit. Students required to write a master's thesis will still need to register for six hours of research.
4. Two graduate courses were approved:

IM 500	Management Simulation
IM 506	Location of Economic Activity
5. The Council discussed the present rules governing grades of C made by graduate students on courses numbered below 500. A committee will be appointed to consider this question and will make its recommendations at the next meeting of the Council.

MINUTES OF THE RESEARCH FACULTY COUNCIL

A regular meeting of the Research Faculty Council was called to order at 3:00 p.m., February 16, 1965, in Olin Hall by the chairman, P. E. Robbins (TC).

John B. Gentry, University Personnel Director, met with the council and presented information on the subject "Pay scale for undergraduate students." He explained the role played by his office, the classification system for working students, the pay scale, the modifications of this scale due to extenuating circumstances, the value of a consistent pay scale, and the cooperation between the personnel office and the deans of the various colleges within the University.

Seventeen suggestions have been received by the research council from research faculty members concerning the present research programs and methods of possible improvement. The chairman has divided these topics among the executive, personnel or policy committee for study.

Meeting adjourned at 4:05 p.m.

Absences:

F. J. Lindstrom
A. C. Elrod

ALGERNON SYDNEY SULLIVAN AWARD

The Honors and Awards Committee invites all faculty and staff members to submit nominations for the non-student recipient of this year's Sullivan Award, which will be made on Honors and Awards Day, May 5, 1965. The award is described on page 73 of the 1963-64 University catalog.

The nominations should be made by March 20 and sent directly to C. B. Green, 28 Tillman Hall, or to one of the members of the Committee: J. T. Lazar and T. V. Wilson (Agriculture and Biological Sciences); G. C. Means (Architecture); H. E. Vogel (Arts and Sciences); A. D. Lewis and J. C. McCormac (Engineering); J. J. Porter and J. V. Walters (IM and TS); L. C. Johnson (Air Force); F. M. McConnell (Army); A. M. Bloss, G. E. Coakley, Susan G. Delony, and K. N. Vickery (Student Affairs).

Non-student recipients of the Sullivan Award for the past ten years have been:

1955 - S. R. Rhodes
1956 - P. B. Holtzendorff, Jr.
1957 - S. J. L. Crouch
1958 - A. B. Bryan
1959 - Helen Coker
1960 - C. C. Bennett
1961 - J. D. Lane
1962 - B. E. Goodale
1963 - R. M. Cooper
1964 - F. J. Jervey

HYDROLOGY CONFERENCE

The Clemson University Council on Hydrology (CUCOH) is sponsoring a conference on Hydrologic Activities in the South Carolina Region. The conference will be held in the Clemson House on March 17 and 18. The scope of the conference may be indicated by the list of speakers and their topics:

- | | |
|---|---|
| R. Molinaroli, Corps of Engineers, Charleston, S. C. | "Flood Plain Studies" |
| H. J. Dowdle, Soil Conservation Service, U. S. Dept
of Agriculture, Columbia, S. C. | "Planning Water
Management for a
Small Watershed" |
| James E. Douglass, Coweeta Hydrologic Laboratory,
U.S. Forest Service | "Research in Forest
Hydrology at the
Coweeta Hydr. Lab." |
| George Siple, U.S. Geological Survey, Columbia, S.C. | "Salt Water Encroach-
ment in the Coastal
Areas of S. C." |
| Shem K. Blackley, Jr., Duke Power Company | "Water Resources
Development by an
Electric Utility Co." |
| William E. Fox, U.S. Weather Bureau, Augusta, Ga. | "Methods of River
Forecasting" |
| A. W. Snell, Clemson University | "Clemson University's
Program in Hydrology" |
| Thomas Fridy, Lockwood-Greene Engineers | "Consultant's Interest
in Hydrology" |
| Anson R. Bertrand, Conservation Research Division,
Agricultural Research Service,
Athens, Georgia | "Research in Agricultural
Hydrology in the
Piedmont Region" |

All interested faculty and staff are invited to attend and to extend invitations to their colleagues throughout the State and region.

Of particular interest is the dinner meeting which will be held at the Clemson House at 6:30 p.m. on Wednesday, March 17. Dr. Cecil H. Wadleigh, Director of the Soil and Water Conservation Research Division of the Agricultural Research Service, Beltsville, Maryland, will be the dinner speaker.

Dinner reservations may be made by contacting A. G. Law, Department of Engineering Mechanics, ext. 265, before March 17.

ENROLLMENT BY MAJOR COURSES AND STUDENT CLASSIFICATION

Second Semester 1964-65

Major Course	Freshman (Semester)		Sophomore (Semester)		Junior (Semester)		Senior (Semester)		Total
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	
Agriculture	1	3	0	0	0	0	0	0	4
Agricultural Economics	4	13	3	8	6	2	5	3	44
Agricultural Education	17	17	6	6	11	7	10	11	85
Agricultural Engineering	5	3	2	3	3	3	3	2	24
Agronomy	5	3	4	5	4	1	5	8	35
Animal Science	10	13	5	4	2	5	7	3	49
Botany	10	10	6	15	7	10	11	9	78
Dairy Science	2	4	2	0	1	3	4	7	23
Entomology	0	1	0	2	0	1	1	0	5
Food Science	0	7	0	1	1	2	0	1	12
Forestry	26	22	7	18	5	6	15	8	107
Horticulture	12	10	4	6	4	6	9	7	58
Poultry Science	0	0	2	0	0	4	2	0	8
Pre-Veterinary	19	19	5	8	5	1	0	0	57
Sub-Total	111	125	46	76	49	51	72	59	589
Architecture	55	45	25	25	13	17	33*	30**	243
Building Construction	6	8	9	5	2	2	7	1	40
Sub-Total	61	53	34	30	15	19	40	31	283
Applied Mathematics	18	21	7	17	8	14	8	9	102
Arts and Sciences	133	128	62	102	53	59	61	50	648
Biochemistry	13	16	1	12	4	9	2	4	61
Education	0	0	0	0	0	0	2	0	2
Medical Technology	4	4	2	2	2	1	1	0	16
Physics	7	18	2	9	2	8	5	3	54
Pre-Medicine	47	56	21	45	12	22	6	10	219
Pre-Pharmacy	5	1	0	1	0	0	0	0	7
Sub-Total	227	244	95	188	81	113	85	76	1109
Engineering	20	2	0	0	0	0	0	0	22
Graphic Engineering	18	2	6	7	6	10	7	5	61
Chemical Engineering	59	16	6	29	5	21	12	23	171
Civil Engineering	84	39	12	32	12	29	25	28	261
Electrical Engineering	125	44	36	46	27	39	39	38	394
Industrial Education	4	5	1	5	2	6	7	4	34
Industrial Engineering	16	4	11	6	4	7	8	1	57
Mechanical Engineering	93	38	35	44	16	29	41	17	313
Metallurgical Engineering	4	1	1	1	1	2	0	0	10
Sub-Total	423	151	108	170	73	143	139	116	1323
Industrial Management	80	95	37	62	50	63	61	42	490
Textile Chemistry	11	5	2	7	0	5	4	7	41
Textile Management	11	21	15	23	7	27	23	25	152
Textile Science	1	5	0	2	1	5	7	1	22
Sub-Total	103	126	54	94	58	100	95	75	705
Total	925	699	337	558	276	426	431	357	4009***
					Part-Time		Full-Time		
Undergraduates					120		185		305
Postgraduates					14		10		24
Unclassified					28		2		30
Total					162		197		359
Grand Total									4368

*Includes five who are in the first semester of the fifth year.

**Includes eighteen who are in the second semester of the fifth year.

***Includes seventy-four part-time undergraduates.

ENROLLMENT BY MEN AND WOMEN - FULL-TIME AND PART-TIME

Second Semester 1964-65

Classification	Men			Women			Total		
	Full Time	Part Time	Total	Full Time	Part Time	Total	Full Time	Part Time	Total
1st Sem. Freshman	885	7	892	30	3	33	915	10	925
2nd Sem. Freshman	641	10	651	44	4	48	685	14	699
Sub-Total	1526	17	1543	74	7	81	1600	24	1624
1st Sem. Sophomore	314	3	317	15	5	20	329	8	337
2nd Sem. Sophomore	516	6	522	32	4	36	548	10	558
Sub-Total	830	9	839	47	9	56	877	18	895
1st Sem. Junior	257	5	262	12	2	14	269	7	276
2nd Sem. Junior	412	7	419	7	0	7	419	7	426
Sub-Total	669	12	681	19	2	21	688	14	702
1st Sem. Senior	412	7	419	6	1	7	418	8	426
2nd Sem. Senior	320	10	330	10	0	10	329	10	339
Sub-Total	732	17	749	16	1	17	747	18	765
1st Sem. Fifth Year	5	0	5	0	0	0	5	0	5
2nd Sem. Fifth Year	18	0	18	0	0	0	18	0	18
Sub-Total	23	0	23	0	0	0	23	0	23
Total	3780	55	3835	156	19	175	3935	74	4009
Graduates	169	106	275	15	14	29	185	120	305
Postgraduates	10	13	23	0	1	1	10	14	24
Unclassified	0	7	7	2	21	23	2	28	30
Total	179	126	305	17	36	53	197	162	359
Grand Total	3959	181	4140	173	55	228	4132	236	4368

GRADUATE RECORD EXAMINATIONS

On Tuesday, March 16, all candidates for the bachelor's degree in June, August, and December 1965 will take the Graduate Record Examinations. At 8:15 a.m. candidates for graduation during the coming year who are majoring in Applied Mathematics, Arts and Sciences, Chemistry, Engineering, and Physics will take Advanced Tests at the following locations:

Advanced Test

Literature
Mathematics

Biology
Chemistry
Economics
French
Geology
History
Physics

Engineering*

Agricultural
Ceramic
Chemical
Civil
Electrical
Industrial
Mechanical

Report To

Food Industries Auditorium

P&A Auditorium

Agricultural Engineering Aud.
Ceramics Auditorium
Chemical Engineering Aud.
Agricultural Engineering Aud.
300 Riggs Hall
Chemical Engineering Aud.
Civil Engineering Auditorium

All candidates will take the Aptitude Test beginning at 1:30 p.m. at the following locations:

College, School, or Major

College of Agriculture and
Biological Sciences

School of Architecture

College of Arts and Sciences

College of Engineering

Agricultural Engineering
Ceramic Engineering
Chemical Engineering
Civil Engineering
Electrical Engineering
Industrial Education
Industrial Engineering
Mechanical Engineering

School of Industrial Management
and Textile Science

Report To

P&A Auditorium
Food Industries Auditorium
(As directed)

123 Architecture

Chemistry Auditorium

Agricultural Engineering Aud.
Ceramics Auditorium
Chemical Engineering Aud.
Agricultural Engineering Aud.
300 Riggs Hall
Ceramics Auditorium
Chemical Engineering Aud.
Civil Engineering Aud.

Sirrine Auditorium
(Report at 1 p.m.)

The following faculty members have been designated by their Deans to administer these tests in their respective colleges or schools:

Agriculture & Biological Sciences	Dr. L. H. Davis
Architecture	Mr. E. A. Gunnin
Arts & Sciences	Dr. H. F. Landrith
Engineering	Mr. S. M. Watson
Industrial Management & Textile Science	Mr. J. L. Richardson

* All Engineers take same Advanced Test.

LACROSSE CLUB SPONSOR NEEDED BY STUDENTS

A student group is seeking a faculty advisor for a Lacrosse Club. A person is needed who can help with organization and coaching. Any faculty member who is interested should contact Bob Berman. His dormitory residence is A-615; his telephone number is 654-9931.

Gifts and Grants

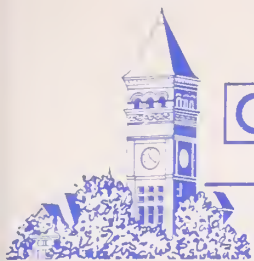
The gifts and grants listed below have been received since the February 15 Newsletter was printed:

- from the Woman's Auxiliary of the S. C. Association of Veterinarians, \$20 to the library.
- From the Humble Oil Education Foundation to the College of Engineering, \$2500 for aid to educational programs.
- From the National Science Foundation to the Department of Chemistry, \$204,070 to assist in the construction of the new wing to the Chemistry Building.
- From the Cotton Producers Association to the College of Agriculture and Biological Sciences, \$900 for an undergraduate scholarship.

PERSONAL MENTION

- Larry T. Taylor, Chemistry doctoral student, has been granted a Health, Education and Welfare postdoctoral research fellowship at Ohio State University.
- J. F. Andrews (CE) presented a paper at the February 10 55th National Meeting in Houston, Texas of the American Institute of Chemical Engineers. On February 12 he lectured at the University of Texas.
- John Butler (director of bands) presented a paper at the Columbia meeting of the South Carolina Band Directors Association on February 20. At the same meeting Mr. Butler was elected to the office of Vice-President of the Band Division of S. C. M. E. A. He already holds the office of Vice-President of College Band Directors in the Southern Division of College Band Directors, National Association.
- Walter Cox (student affairs) served as a member of the Southern Association of Colleges and Schools committee visiting East Kentucky State College, February 20-24.
- E. W. King (Ento) was elected president of the S. C. Entomological Society at its meeting in Charleston, February 16-17. R. C. Fox (ento) was elected secretary-treasurer. Clemson faculty and graduate students presenting papers at the meeting included V. M. Kirk, S. B. Hays, G. F. Fedde, A. S. Tombes, M. D. Farrar, A. B. Ward and R. C. Fox.
- Everett Laitala (Ind Engr) spoke on Industrial Engineering at the Clinton High School Science Forum on February 19th.
- Mary Stevenson (Library) has been granted leave for August and September, 1965 to travel in Europe.
- C. V. Aucoin (math) has been invited to participate in the Mathematics Association of America High School Lecture Series this spring. The lectures will be given in various schools throughout the state.
- S. M. Willis (I.M.) has been appointed as a member of the Graduate Council, replacing C. H. Whitehurst (I.M.).
- L. G. Rich (Engr.) has been granted academic tenure, effective March 1.
- H. H. Macaulay (Grad. School) served as a program consultant for NSF at Washington, D. C., February 15-17.
- The section on "Clay" in the "annual review of minerals" published in Mining Engineering (February, 1965) was prepared by G. C. Robinson (Cer. Engr.).
- L. G. Rich (Engr) will speak at the annual Engineers' Week Banquet sponsored by the Savannah River Joint Council of Engineering and Scientific Societies on February 24, at 7 p.m. in Augusta, Georgia..
- J. C. Martin (EE) attended a seminar on Advanced Control Systems at the University of Florida, February 15, 16 & 17.
- A faculty group, headed by Dr. J. N. Thurston (EE), will present the program at the Greenville Subsection meeting of the IEEE on February 25 at the Colonial Restaurant in Greenville.

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C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 4, No. 13

CALENDER: MARCH 16-APRIL 3

March 15, 1965

- March 16-April 3 Exhibition at Lee Gallery, School of Architecture.
8th Annual High School Art Show.
- Mar. 16 T Regular meeting of Research Faculty Council. 4 p.m.,
Olin Hall.
- Mar. 16 T Gamma Sigma Delta luncheon. Noon, Food Industries
Auditorium.
- Mar. 16 T D. R. H. Gourley (Univ. of Virginia) will speak on
"Potassium exchange in skeletal muscle." Sigma Xi
and Biology Club lecture. 7:30 p.m.; Earle Hall
Auditorium.
- Mar. 16 T Fellowship Club, 6:30 p.m., Clemson House.
- Mar. 17 W Laicos Club, 8:15 p.m., Clemson House. Bridge group.
- Mar. 17 W Newcomers, 8 p.m., Clemson House. Bridge group.
- Mar. 17 W Henry Margenau (Yale) will lecture on "Philosophical
Perspective of Modern Science." 4 p.m., 101 Physics.
At 8 p.m. in the same room, Dr. Margenau will speak
on "The Meaning of Physical Reality."
- Mar. 17 W Tennis: Clemson v. Tennessee.
- Mar. 18 Th J. A. Laberee (duPont Co.) will lecture on "The Role
of the Large Corporation." 2 p.m., Sirrine Auditorium.
- Mar. 18 Th Henry Margenau (Yale) will lecture on "Esthetics
and the Theory of Relativity." 4 p.m., 101 Physics.
At 8 p.m. in the same room, Dr. Margenau will speak
on "Ethics and Science."
- Mar. 20 S Tennis: Clemson v. Furman.
- Mar. 22 M Dr. J. Sicher, from Prague will lecture on "Confor-
mational Equilibria in Disubstituted Cyclohexane
Derivatives". 4 p.m., Room 118 Chemistry Dept.
- Mar. 22 M Prof. George F. Sowers, Professor of Civil Engineering,
Georgia Tech will lecture on "Ancient Construction".
8:15 p.m. Food Industries Auditorium.
- Mar. 22 M Forum Club, 7 p.m. Chemistry Building Conference Room.
C. W. Bolen will read a paper.
- Mar. 23 T F. J. Johnson (Lockheed-Georgia) will lecture on
"Value Engineering." 7 p.m., C. E. Auditorium.
- Mar. 24 W Graduate Wives, 8 p.m., Clemson House.

Calendar: March 16-April 3, continued

Mar. 24	W	Newcomers Club, Arts and Crafts, YMCA, 8 p.m.
Mar. 25	Th	German Movie, "Confess, Dr. Corda." 101 minutes. 7 & 9 p.m. Chemistry Auditorium.
Mar. 25	Th	W. J. Burton, Manager of Public Relations, Duke Power Company, will speak on "Duke Power Company's development program for the Tri-County area on the Keowee and Toxaway Rivers." Room A101 Plant & Animal Science Building, 3:15 p.m.
Mar. 25	Th	Winthrop Daughters will meet with Mrs. Carlyle Morgan, Six Mile Road at 8 p.m. Assistant hostesses will be Mrs. Gilbert Fulmer and Miss Sidelle Ellis.
Mar. 27	S	Tennis: Clemson v. Dartmouth.
Mar. 27	S	Baseball: Clemson v. Davidson.
Mar. 29	M	Louis B. Wright (Folger Shakespeare Library) will speak on "History for Entertainment." 8 p.m., Chemistry Auditorium.
Mar. 29	M	Baseball: Clemson v. Ohio University.
Mar. 29	M	Tennis: Clemson v. University of S. C.
Mar. 30	T	Baseball: Clemson v. Ohio University.
Mar. 30	T	Tennis: Clemson v. University of Georgia.
Mar. 30	T	Golf: Clemson v. Virginia.
Mar. 31	W	Laicos Club, 8:15 p.m., Clemson House.
Mar. 31	W	Baseball: Clemson v. Miami (O.).
Mar. 31	W	Track Meet: Clemson v. Cornell.
Apr. 1	Th	Concert: Van Cliburn, 8 p.m. Field House.
Apr. 1	Th	Woman's Club. Will meet in the Clemson House at 9:30 a.m. for the election of officers at a short business meeting. Following this the group will leave for a trip by bus to Columbia to tour the Governor's Mansion and have lunch with Mrs. Russell.
Apr. 1	Th	Baseball: Clemson v. Miami (O.).
Apr. 3	S	Baseball: Clemson v. Georgia Tech.

1956-64 SUMMARY REPORT ALUMNI LOYALTY FUND

(The Nine Years Since Reorganization of the Alumni Office)

YEAR	TOTAL INCOME	PROGRAM EXPENSES	"RESIDUE"
1956	\$ 31,728.27	\$ 10,000.00 (close est.)	\$ 21,728.27
1957	44,113.81	20,825.96	23,287.85
1958	56,950.70	25,361.90	31,588.80
1959	80,089.66	30,882.75	49,206.91
1960	107,834.12	35,768.77	72,065.35
1961	116,995.83	41,741.85	75,253.98
1962	151,035.00	41,859.41	109,175.59
1963	109,240.65	35,511.78	73,728.87
1964	124,759.76	45,439.23	79,320.53
TOTALS	\$ 822,747.80	\$ 287,391.65	\$ 535,356.15

GRANTS FROM UNRESTRICTED FUNDS

	1956-59	1960	1961	1962	1963	1964	TOTAL
Alumni Graduate School	\$ 9,600.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$ 59,600.00
Faculty Research & Development	10,050.00	10,650.00	9,500.00	6,156.00	12,500.00	10,000.00	58,856.00
R. F. Poole Scholarships	4,206.94	6,000.00	8,000.00	10,000.00	9,200.00	10,200.00	47,606.94
Alumni Memorial Scholarships	-	-	-	-	-	1,200.00	1,200.00
Alumni Professorships	-	-	3,000.00	4,500.00	4,500.00	4,500.00	16,500.00
Library	10,801.12	2,500.00	-	-	-	-	13,301.12
Student Government	500.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	5,500.00
Foundation Loan Fund	20,000.00	-	-	-	-	-	20,000.00
Loyalty Fund Reserve	12,715.00	8,410.00	8,800.00	7,130.00	8,352.09	-	45,407.09
Permanent Endowment	7,773.35	10,057.78	11,067.48	5,001.32	13,230.78	6,739.50	53,870.21
TOTALS	\$ 75,646.41	\$48,617.78	\$51,367.48	\$43,787.32	\$58,782.87	\$43,639.50	\$321,841.36

RESTRICTED INCOME

	1956-59	1960	1961	1962	1963	1964	TOTAL
Permanent Endowment	\$40,177.05	\$ 2,915.00	\$ 1,165.00	\$ 4,458.25	\$ 685.00	\$ 675.00	\$ 50,075.30
Other Restricted Gifts	10,583.37	19,937.57	22,721.50	60,930.02	14,261.00	35,006.03	163,439.49
TOTALS	\$50,760.42	\$22,852.57	\$23,886.50	\$65,388.27	\$14,946.00	\$35,681.03	\$213,514.79

AVERAGE ALUMNI GIFT

YEAR	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
	\$7.09	\$8.16	\$9.62	\$12.64	\$23.11	\$26.91	\$30.48	\$40.09	\$29.75	\$30.81

ALUMNI FUND GRANT TO FINANCE NEW UNDERGRADUATE SCHOLARSHIP PROGRAM

When grants were made to Clemson's academic program from the income of the 1964 Alumni Loyalty Fund, a new program to encourage high undergraduate scholarship was launched. In addition to the grant of \$10,200 to finance the R. F. Poole Alumni Scholarship program, a grant of \$1,200 will enable expansion in the area of financial aid to incoming students of high scholarship attainment.

The R. F. Poole alumni scholarships are Clemson's "prestige awards" for incoming students and are competitive with such awards made by other universities of Clemson's size and character. In 1965-66 the four freshmen Poole scholars will be granted \$750 each.

The second program will offer an additional group of first-year scholarships at \$300 each to the four students below the Poole group who show the highest academic promise. This will (1) enable Clemson to add a few more top students to the student body, (2) demonstrate to all students that scholarship at Clemson is as honored as any other attribute, (3) place Clemson in a better competitive position with the finer colleges and universities, (4) help Clemson continue to meet senior university accrediting standards which call for scholarship assistance designed to honor scholarship, and (5) will serve as a strong morale factor to faculty who expect the University to encourage scholarship as its central goal.

Chemistry Adds Honors Courses

Students majoring in Chemistry, who have satisfactorily completed the Junior Division honors requirements, may now qualify for Departmental Honors in Chemistry. Upon successful completion of twelve semester hours of honors courses, selected with the approval of the departmental honors adviser, with a minimum grade of B in each course and a cumulative grade-point ratio of 3.0, the Chemistry Department will certify to the Honors Council that the student has successfully met the requirements of the program and should be awarded an Honors Diploma.

The courses used for departmental honors shall normally be selected from Chem 443, Chem 444, Chem 431, and any chemistry course of the 500 series. Other advanced courses, including those from other departments, may be used. The student shall register for the courses under the appropriate honors numbers.

Professor J. C. Fanning is the Faculty Adviser for departmental honors students in Chemistry.

Graduate School Enrollments by Semesters

	<u>1960-61</u>		<u>1961-62</u>		<u>1962-63</u>		<u>1963-64</u>		<u>1964-65</u>	
<u>Agriculture</u>										
Agricultural Economics	6	6	7	7	8	9	7	6	8	10
Agricultural Education	12	7	3	4	7	5	3	3	2	2
Agronomy	3	3	5	4	4	5	8	10	11	9
Animal Science	1	2	1	2	1	1	2	2	3	2
Bacteriology	2	1	2	2	1	1	4	4	3	3
Dairy	1	2	2	1	3	2	4	7	9	11
Entomology	8	7	10	8	9	9	13	14	13	14
Horticulture	10	10	5	8	12	11	10	9	11	12
Nutrition									2	1
Plant Pathology	5	5	5	4	7	8	6	7	6	7
Poultry	2	3	4	4	5	5	4	5	4	3
Zoology	<u>4</u>	<u>3</u>	<u>5</u>	<u>4</u>	<u>2</u>	<u>3</u>	<u>7</u>	<u>9</u>	<u>16</u>	<u>19</u>
Total Agriculture	54	49	49	48	59	59	68	76	88	93
<u>Architecture</u>										
						1	1	2	1	1
<u>Arts & Sciences</u>										
Chemistry	25	29	32	21	32	30	41	38	37	36
Economics							1	1	1	0
Education - English									0	5
Education - History									3	3
Education - Mathematics									1	0
Education - Science									2	3
Education	19	12	15	13	8	17	9	8	0	0
English							2	5	8	8
History									2	1
Mathematics	4	3	9	8	11	10	17	15	28	24
Nuclear Science	3	2								0
Physics	<u>9</u>	<u>10</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>20</u>	<u>21</u>	<u>27</u>	<u>28</u>
Total Arts & Sciences	60	56	68	64	63	69	90	88	109	108
<u>Engineering</u>										
Agricultural Engineering	5	4	7	9	6	7	6	5	10	9
Bio-engineering									1	1
Ceramic Engineering	3	1	1	1	7	7	8	8	8	6
Chemical Engineering	4	4	8	8	10	8	15	14	23	23
Civil Engineering	1	1		2	5	5	7	7	12	8
Electrical Engineering	1	2	4	4	6	6	6	6	6	7
Engineering Mechanics									3	4
Industrial Education					3	4	2	5	7	7
Materials Engineering					1	1	1	2	2	1
Mechanical Engineering	8	6	7	6	10	11	15	15	14	13
Water Resources Engineering			<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>13</u>	<u>10</u>	<u>6</u>	<u>6</u>
	22	18	29	33	52	54	73	72	92	85
<u>Ind. Mgr & Text. Science</u>										
Textile Chemistry	9	6	7	4	4	4	8	7	6	5
Industrial Management					<u>4</u>	<u>6</u>	<u>6</u>	<u>5</u>	<u>9</u>	<u>7</u>
Total IM & TS	<u>9</u>	<u>6</u>	<u>7</u>	<u>4</u>	<u>8</u>	<u>10</u>	<u>14</u>	<u>12</u>	<u>15</u>	<u>12</u>
<u>Unclassified</u>	1	1	6	9	9	1	12	4	9	4
TOTAL ENROLLMENTS	146	130	159	158	191	194	258	254	314	303

Notes on Meeting of the Faculty Senate of Clemson University

The one-hundred-and-fourth meeting of the Faculty Senate was held on February 9, at 4:00 p.m. After calling the meeting to order, President John Miller asked for committee reports. These were given as follows:

1. The Welfare Committee has had a study made on the possibilities of establishing a funeral society for the University. Professor Felder had prepared a preliminary report on the purposes and functions of such a society, copies of which were distributed to all members of the Senate for study. Recommendations for action on this report may be made at the next meeting.

2. Professor Ball of the Scholarship and Admissions Committee showed the Senate drafts of the new form proposed for the Doctor of Philosophy diploma.

A motion was made and seconded that this form be accepted, with a minor change in the size of some of the lettering. After considerable discussion, this motion was passed.

Professor Ball also reported on the study made of students graduating after having started with a very low grade-point ratio. This study showed that some of these students who graduate have grade-point ratios in their major fields lower than the over-all grade-point ratio required for graduation. Members of the Faculty Senate were asked to seek the opinions of other members of their departments concerning a possible Faculty Senate proposal that all students be required to have a grade average, in all courses taken in their major field, at least as high as the grade-point ratio required for graduation. An expression of opinion on this subject will be asked for at the next meeting.

The president then asked that the Scholarship and Admissions Committee report next time on the question of need for the establishment of a Faculty Senate committee on the University Bookstore. It was reported previously that Mr. John Cureton, manager of the bookstore, feels there is no need for such a committee.

Also President Miller reported receiving a Student Senate resolution recommending that a "reading period" of one and a half days be scheduled between the end of the class period and beginning of the final examination period, to enable students to prepare for their examinations. The Faculty Senate is asked to concur in this request and urge its implementation in time for the 1966-67 school year. This matter also was referred for study to the Admissions and Scholarship Committee.

VALUABLE MATHEMATICS COLLECTION PURCHASED

National Science Foundation funds (\$1800) have made possible the purchase of a very valuable collection of mathematics journals from Mrs. M. K. Fort, Jr. of Athens, Georgia. The collection covers 162 years, and is an outstanding addition to the Clemson holdings.

ANNUAL RE-WORK PERIOD - TRAVELERS INSURANCE GROUP

The annual re-work period for the Travelers Insurance Group will be March 1-31, 1965. Company representatives will be on campus during this period and will be available to explain the Travelers plans and coverage to any interested employee. Visits will be made to any department desiring such and at times most convenient to the respective departments.

Any present member desiring to make changes to fit individual needs may do so at this time. Employees presently enrolled and desiring no changes will be automatically continued and need not contact the representatives at this time. Anyone who desires to obtain this type of insurance coverage must make application during the first 31 days of employment, or during this re-work period.

If you wish to make an appointment with one of the representatives, you may do so by contacting W. J. Stamey, Personnel Division, Extension 365.

GIFTS AND GRANTS

The gifts and grants listed below have been received since the March 1 Newsletter was printed:

- A scholarship has been established by the Cotton Producers Association of Atlanta, Georgia, to give recognition and assistance to an outstanding student majoring in one of certain agricultural subjects offered at Clemson University. The award of \$900 will be paid in three annual installments, for the sophomore, junior, and senior years.
- Dr. Robert F. Borgman, Associate Professor in the Department of Food Science and Biochemistry has been awarded a research grant of \$14,160 from the National Institutes of Health to do research on "Pathogenesis of Gallstones and Lipid Metabolism."

Personal Mention

- Roy J. Ferree(ext) was a participant in the National Peach Council's March 11-12 conference at Rutgers University.
- S. C. Gambrell (EM) has resigned his position as assistant professor in order to accept employment in Alabama.
- P. N. Marinos (EE) will present a paper at the March 22-26 IEEE convention in New York City.
- Ruby Craven (extension) has been elected chairman of the home economics section of the Southern Agricultural Workers Association.
- F. I. Brownley (Chem) will serve as a member of the Southern Association of Colleges and Schools' evaluation team to visit Hampden-Sydney College, April 11-14.
- Harlan McClure (Arch) has been granted academic tenure, effective March 15.
- John Kenelly, Jr. (math) is co-author of a paper printed in Vol. XV of Revista de Matematica y Fisica Teorica.
- W. A. King (DySci) has been elected to a three year term on the Board of Directors of the American Grassland Council.
- Gordon Gourlay (library) is chairman of the S. C. Interinstitutional Library Committee, established by the Council of S. C. State Supported College Presidents.
- R. J. Calhoun (English) has been awarded a contract by the Louisiana State University Press to write a book on 20th Century Southern Literary Criticism. The book will be one of a series of works on Southern Culture under the general editorship of Louis D. Rubin (Hollins College).
- J. M. Stepp (Ag Ec) will present a paper at the March 22-23 meeting of the Conference on Water Resources and Economic Development in Atlanta.
- May Ringold (Soc. Sci) is author of an article that was published in the September issue of the Georgia Historical Quarterly.



NOT FOR PUBLICATION

Volume 4, No. 14

April 1, 1965

CALENDAR: APRIL 3-17

April	3	S	Baseball: Clemson v. Ga. Tech.
April	5	M	Golf: Clemson v. Wake Forest.
April	5	M	German language film, "Confess, Dr. Corda." Chemistry Auditorium, 7 and 9 p.m.
April	5	M	Eugene P. Odum (Univ. of Georgia) will lecture at 4 p.m. in Room 316 Long Hall on "Ecological Research at the Savannah River Plant." At 8 p.m. in Earle Hall Auditorium he will speak on "The New Ecology in Relation to Public Affairs." Both lectures are sponsored by Sigma Xi.
April	6	T	Baseball: Clemson v. Furman.
April	6	T	Sage Club. Clemson House, 6:30 p.m.
April	7	W	Laicos Club, 8:15 Clemson House.
April	7	W	Newcomers, Bridge group, 8 p.m. Clemson House.
April	7	W	Tennis: Clemson v. Harvard.
April	7-28		Exhibition of contemporary prints from Germany. 100 prints from post-war artists in Berlin and Western Germany. Lee Gallery, School of Architecture.
April	8	Th	Tennis: Clemson v. Harvard.
April	8-9	Th,F	R. G. Allen, Director, Water Research Assoc., Marlow, England will lecture. At 4 p.m., Thursday, he will speak on "Chemical Coagulation." At 4 p.m., Friday, he will speak on "Hydrological Research." Both lectures will be in the CE Auditorium.
April	9	F	Baseball: Clemson v. UNC.
April	9	F	Golf: Clemson v. Furman & The Citadel.
April	10	S	Tennis: Clemson v. Presbyterian College.
April	10	S	Golf: Clemson v. Maryland & USC.
April	10	S	Baseball: Clemson v. N. C. State.
April	12	M	Preliminary contests for Trustee's Medal (public speaking). Announcement of hour and place to be made on all University bulletin boards.
April	12	M	Forum Club, 7 p.m. Chemistry Building Conference Room. F. I. Brownley will read a paper.
April	12	M	Baseball: Clemson v. Georgia.

CALENDAR: APRIL 3-17 con't.

April	13	T	Concert: Clemson Concert Band. 8 p.m., Tillman Auditorium.
April	13	T	Academic Faculty Senate (regularly scheduled meeting). 4 p.m. Olin Hall.
April	13	T	Newcomer's Club will meet at 104 Tamassee (Home of Elizabeth Shuler). W. C. Mickelberry will discuss "Dehydrated Foods of the Future."
April	13	T	Golf: Clemson v. N. C. State.
April	14	W	Graduate Wives, 8 p.m., Clemson House.
April	14	W	H. E. Garrett (former head of Psychology, Columbia University) will speak at 4 p.m. in the Chemistry Auditorium and at 8 p.m. in the Physics Auditorium on "Inherent Differences in the Races of Man." AAUP sponsorship.
April	15	Th	Tennis: Clemson v. Hall State
April	15	Th	Easter Holidays begin at 1 p.m.
April	16	F	Tennis: Clemson v. Slippery Rock.

SUMMER RENTALS

Faculty and staff members interested in sub-leasing their furnished homes or apartments during the summer sessions are requested to list them with the Housing Office as soon as possible and until May 15.

A number of High School teachers and other faculty members attending classes at Clemson during the summer are anxious to sublease furnished apartments so their families can accompany them. Phone--Ext. 343 or 347.

Lamb For Sale By Animal Science Department

Lamb carcasses are available at wholesale price from the Animal Science Department. For further information call 654-2421, Ext. 210.

MINUTES OF THE RESEARCH FACULTY COUNCIL

A regular meeting of the Research Faculty Council was called to order at 4:05 p.m., March 16, 1965, by the vice-chairman, Wesley Witcher.

Upon request of Dean J. K. Williams the council reviewed the form entitled "Evaluation of Research Personnel." After much discussion a motion was made by R. L. Edwards that the form be submitted to a committee and any suggestions by council personnel be submitted to P. E. Robbins.

The executive committee submitted the following two subjects for the council to review: (1) The employment of an electronics repairman to service and maintain the specialized electronic equipment on the campus. (2) The need of a central chemical store for campus-wide use. After a brief discussion, all personnel were asked to submit suggestions to P. E. Robbins to be incorporated in the final report.

Meeting was adjourned at 5:10 p.m.

Absences:

W. C. Godley
F. J. Lindstrom
M. J. Skove
P. E. Robbins

Respectfully submitted,



M. A. Boone
Secretary

NSF Fellowships to Clemson Students

The National Science Foundation has awarded fellowships to five Clemson students.

William J. Reid, a graduate student in physics, will have his NSF Cooperative Fellowship continued for the terminal year in his doctoral program.

Iris Brann (math), Earl Wagener (chem), and James Wingate (ME), who are graduate teaching assistants during the current academic year, have been awarded Summer Fellowships to support them in their graduate study during the coming summer.

Stephen A. King has been awarded a Graduate Fellowship for his first year of graduate study in mathematics with Harvard as his designated school.

REPORT ON MEETING OF THE FACULTY SENATE OF CLEMSON UNIVERSITY

The Faculty Senate of Clemson University held its one-hundred-and-fifth meeting at 4:05 P.M. on March 9, 1965. Dr. John Miller presided.

Committee reports were given as follows:

1. A proposal that a one-and-a-half-day reading period be scheduled between the last class and the beginning of final examination period was endorsed by the Senate. This proposal was originally passed by the Student Senate and sent to the Faculty Senate for consideration. The study of this proposal was made by the Admissions and Scholarship Committee under the chairmanship of Professor W. L. Ball.
2. Several suggestions were made for the change in time of meetings for the Faculty Senate. The need for this change is the result of the change in the university calendar beginning next year. Since any change in meeting time entails an amendment to the By-Laws of the Faculty Senate Constitution, these suggestions will be formulated as amendments and will be presented at the April meeting of the Senate.
3. Since Professor A. L. Shewfelt was absent, the recommendation of the Welfare Committee on the establishment of a funeral society was presented by Professor H. M. Felder.

Much interest was evinced by the Senate, and it was suggested that the Academic Faculty should be informed of the merits of such a plan, so as to determine whether there is enough interest for the Welfare Committee to continue its efforts in this direction. A motion was made, seconded, and passed that the Welfare Committee distribute the information on a funeral society to members of the Academic Faculty for their reactions.

After these committee reports, resolutions were made expressing the deep regrets of the Senate over the recent passing of Professor Randall of the Forestry Department and of Professor Bradley, past Head of the English Department. Letters are being sent from the Senate to the bereaved families.

The president then announced that next year two new members are to be added to the Senate, one from the College of Agriculture and Biological Sciences, and one from the College of Arts and Sciences. They will be seated at the May meeting.

The meeting was then adjourned.

Absent:

Barlage, W. B.
Brown, C. O.
Flatt, J. L.
Lewis, A. D.
McHugh, C. M.
Shewfelt, A. L.

FACULTY ADDITIONS

The following people have signed contracts of employment with the University since the printing of the last issue of the Newsletter.

--in IM, NoKyoong Kwak of Seoul, Korea and Portales, New Mexico will become an assistant professor in August. He has his B.A. from California Western University, his Masters from the University of California (Berkeley), and his Ph.D. from the University of Southern California. He had had two years of teaching experience and is currently assistant professor at Eastern New Mexico University. He has also worked as a research economist for the Tong Bhang Chemical Industrial Company.

Dr. Kwak is married to the former Renee Hyunhi of Seoul and they have one child.

--in EM Melvin K. Richardson will become an assistant professor in August. He has his B.S. degree from Clemson, his M.S. from N. C. State, and is a doctoral candidate at the University of Alabama. He has had three years experience as a design engineer with the Bell Telephone laboratories.

At Clemson Mr. Richardson was a member of Phi Kappa Phi, Tau Beta Pi and Phi Mu Epsilon. He is married to the former Anita Lutes of Selma, Alabama, and they have one child.

--in chemistry, Joseph L. von Rosenberg, Jr. will join the faculty at the beginning of the fall semester. A native of Texas, Dr. von Rosenberg received both the BA and the Ph.D. from the University of Texas, and has industrial experience with both the Ethyl Corp. and Celanese. Married and with three children, Dr. von Rosenberg is at present a Robert A. Welch Post-Doctoral Research Fellow at the University of Texas.

--in economics, Russell D. Shannon will join the Social Sciences faculty in August as an instructor. He has a B.A. degree from Duke and a M.A. degree from Tulane where he is completing residence for his doctorate. He has had four years of experience as a teaching assistant at Tulane.

Registrar's Note on Admissions

As of March 20, more than 1500 students had been accepted for enrollment in the forthcoming freshman class. An additional 1500 applications are being processed as rapidly as possible. Of 3079 "serious" applicants, 334 seek enrollment in agriculture curricula, 329 in architecture, 825 in Arts and Sciences fields, 1067 in engineering, 297 in Industrial Management and Textile Science, and 227 are undecided.

BACHELORS' DEGREES AWARDED BY MAJOR COURSES 1960-64

College or School and Major Course	1960	1961	1962	1963	1964
<u>Agriculture & Biological Sciences</u>	62	65	102	118	101
Agricultural Economics	4	5	14	13	7
Agricultural Education	14	10	18	31	17
Agronomy	7	9	5	3	10
Animal Science	12	9	12	15	8
Biology			6	9	12
Dairy Science	12	3	8	4	9
Entomology	2	4	2	3	1
Forestry	8	18	25	24	21
Horticulture	3	7	12	14	14
Poultry Science				2	2
<u>Architecture</u>	17	19	19	11	13
Architecture	17	19	19	11	13
<u>Arts & Sciences</u>	143	174	103	122	134
Applied Mathematics	1	6	4	7	8
Arts & Sciences	32	36	50	63	83
Chemistry	9	9	9	8	12
Education	21	22	27	13	4
Industrial Education	4	7*			
Industrial Management	62	77*			
Medical Technology					1
Physics	3	8	6	12	9
Pre-Medicine	11	9	7	19	17
<u>Engineering</u>	218	206	199	208	205
Agricultural Engineering	7	12	17	8	7
Ceramic Engineering	20	19	19	14	15
Chemical Engineering	26	19	13	20	28
Civil Engineering	26	35	41	31	36
Electrical Engineering	71	58	34	60	51
Industrial Education		6*	8	10	8
Industrial Engineering	17	10	11	13	11
Mechanical Engineering	51	47	56	52	49
<u>Industrial Management & Textile Sci.</u>	44	56	143	175	135
Industrial Management			92*	118	70
Textile Chemistry	6	7	7	8	8
Textile Engineering	9	1			
Textile Management	3	37	37	43	50
Textile Manufacturing	25	9	1		
Textile Science	1	2	6	6	7
TOTAL	484	520	566	634	588

* Industrial Education transferred from Arts and Sciences to Engineering July 1, 1961.

* Industrial Management transferred from Arts and Sciences to IM & TS July 1, 1962.

Clemson University Concert Band Announces Spring Tour

The sound of fine band music will be heard in the State as the seventy-piece Clemson University Concert Band, under the direction of John H. Butler, takes the road for its 1965 Spring Concert Tour.

The tour, which opens with a concert at Chester on April 6, will also include concerts in Union, Chapin, Camden, Bishopville, Hopkins, Cayce, Sumter, Andrews, Georgetown, and Clemson. Most of these concerts are presented in the local high school auditorium and are open to the public. Information regarding admittance may be obtained from band directors in the respective cities.

The eleven tour concerts will include a wide variety of music, calculated to appeal to virtually all tastes. Concert selections will include Nicolai's popular overture "The Merry Wives of Windsor", Bach's "Little Fugue", the "Toccata" by Frescobaldi, Riegger's "Dance Rhythms", and the complete sequence of ballet music from Gounod's popular opera "Faust".

Two arrangements by band conductor Butler will receive their first public hearings on the tour: Tchaikovsky's tone poem "Francesca da Rimini", and the "Tournament Galop", by the much-neglected 19th century American composer Louis Moreau Gottschalk.

Lighter selections will include music from the Broadway stage (Cole Porter's "Can-Can"), a new overture based on songs made famous by the Kingston Trio, George Gershwin's classic miniature "Second Prelude", and, of course, marches, including "Castle Gap", "The Mad Major", and "Jubilee". A special novelty feature will be "Dixieland...Front and Center!", scored for dixieland 'combo' with band accompaniment.

Tour audiences will hear the traditional Clemson songs as well as the above-listed music. Specific dates and times are as follows: April 6 (8 p.m.: Chester), April 7 (9:30 a.m.: Union; 2 p.m.: Chapin; 8 p.m.: Camden), April 8 (10:30 a.m.: Bishopville; 2 p.m.: Lower Richland High in Hopkins; 8 p.m.: Brookland-Cayce High in Cayce), April 9 (9:30 a.m.: Mayewood High near Sumter; 1:30 p.m.: Andrews; 8 p.m.: Winyah High in Georgetown), and April 13 (Clemson University Chapel).

Senior Day

President Edwards has approved a request that "Senior Day" be held from noon, May 6 through noon, May 7. Seniors will be excused from all class and laboratory activities for this event.

Gifts and Grants

The gifts and grants listed below have been announced since the March 15 issue of the Newsletter was printed.

--From Norwich Pharmacal, \$6500 to Poultry Science for studies of coccidia and other micro-organisms.

--From USDA-ARS, \$10,000 to Entomology for research on mites.

--From NASA, \$42,870 to J. Campbell Martin (EE) for "investigation of the use of stellar references for automatic orientation of theodolite platforms."

--From HEW (Water Pollution Control Advisory Group), \$49,600 to L. G. Rich (enr) for graduate training in water supply and pollution control.

--From the 3M Company, to Dr. Harold Landrith (educ) \$2,000 in visual and equipment and supplies.

Personal Mention

--V. S. Griffin (geol) received his Ph.D. degree at Michigan State University's March graduation.

--J. H. Moore and R. L. Sack (CE) were among the speakers at the two-day short course on "Concrete Shell Structures," held at Clemson March 26-27 under joint sponsorship by Clemson and the Portland Cement Association.

--C. E. Littlejohn (ChE) will be a member of the ECPD Inspection Team to visit the Catholic University of America on April 5-6, 1965.

--Harvey J. Wheeler (econ) has been selected to participate this summer in the Program on Recent Developments in Applied Economics, supported by the General Electric Foundation and sponsored by the Graduate School of Business at the University of Chicago.

--H. H. Macaulay (econ) and C. O. Shuler (IM) will accompany a group of sixteen students to Columbia on April 6 where they will participate in the State Chamber of Commerce's College and Business Symposium.

--W. C. Edel (IM) has resigned his assistant professorship to accept other employment.

--Nicola Vulkovic (hist) has resigned his instructorship.

--Elmer Olsen (extension) has been granted leave to do graduate study at West Virginia University.

Personal Mention - cont.

- Lewis E. Hill (econ) has an article in the March 1965 issue of the Atlanta Economic Review.
- R. J. Amundson (history) has published "Henry S. Sanford and Labor Problems in the Florida Orange Industry," Florida Historical Quarterly (January 1965).
- G. R. Craddock (Agron) is co-author of a 1965 General Soil Map of Greenville County.
- G. C. Robinson (Cr.E.) presented a paper at the annual meeting of the Structural Clay Research Foundation in Geneva, Illinois on March 8.
- S. F. Hulbert (Cr.E.) presented a paper at the Southeastern Section of American Ceramic Society in Columbia on March 27.
- President Edwards, in his position as S. C. Civilian aide to the Secretary of the Army, attended a four day security seminar (March 22-25) at Fort Bliss.
- Edward Pinckney and Richard Reep (Arch) have been elected to the Academic Faculty Senate for three-year terms. They are replacing George Means and Joe Young whose terms as Senators end next month.
- C. M. Drake (German) has resigned his instructorship to continue his graduate study.
- Virginia S. Hardie (Counseling Psychologist), who is a member of the Higher Education Committee of the National Vocational Guidance Association, will meet with this Committee to present plans to the membership of American Personnel and Guidance Association at the National Meeting, April 10-16, in Minneapolis.
- G. W. Brandt (dairy Sci) participated in the annual meeting of the Southern Regional Technical Committee, Dairy Cattle Breeding, at the University of Florida, Gainesville, March 29-30. Dr. Brandt will give a Progress Report on work being done at Clemson.
- J. H. Mitchell (Food Tech) directed this month a short course in Food Technology for Public Health employees in South Carolina. 97 people attended, including three from N. C., six from Florida, and one from Tennessee. Two industrialists and a representative from the Regional U. S. Public Health office were also present.
- J. H. Moore (CE) will be one of the three judges on March 29 at the Carolina Finals of the High School Model Building Contest sponsored by the Carolinas Branch of the Associated General Contractors.
- John W. Hubbard (AgEcon) was elected vice chairman of the Southern Farm Management Research Committee for 1965-66 during the March 15-17 meeting of the group in Atlanta. He also participated in a seminar on conceptual and practical difficulties of measuring the contribution of management to farm output.
- Lewis E. Hill (Econ) has published "Laissez-faire Capitalism and 'Liberalism'" in the American Journal of Economics and Sociology (October 1964) and "The Purpose and Function of Labor Unions," in the Atlanta Economic Review (March 1965).

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C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 4, No. 15

April 15, 1965

CALENDAR, APRIL 16-MAY 2

- April 16-April 28 Exhibition of contemporary prints from Germany. 100 prints from post-war artists in Berlin and Western Germany. Lee Gallery, School of Architecture.
- April 19 M Tennis: Clemson v. Georgia Tech
- April 20 T Research Faculty Council. Regular meeting.
- April 20 T Fellowship Club, 6:30 p.m., Clemson House.
- April 21 W Graduate Wives, 8 p.m., Clemson House.
- April 21 W Laicos Club, 8:15 p.m., Clemson House.
- April 21 W Newcomers Club, Bridge, 8 p.m., Clemson House.
- April 21 W Track: Clemson v. Furman
- April 22 Th Organizational meeting of University Council on Water policies. Program to include a seminar led by L. E. Hendricks (Exec. Secv., S. C. Soil Conservation Committee).
- April 22-23 Th,F Two day conference for High School Counselors on engineering and engineering education. Clemson House and engineering buildings.
- April 23 F Baseball: Clemson v. Duke.
- April 23-24 F,S Tennis: State meet.
- April 24 S Baseball: Clemson v. Wake Forest.
- April 24 S Track: Clemson v. Univ. North Carolina.
- April 26 M Foreign language movie (French), "The Marriage of Figaro." 7 & 9 p.m. Chemistry Auditorium.
- April 26 M Forum Club, 7 p.m., Chem. Bldg. & Conf. Room. C. O. Caskey will read a paper.
- April 26-27 M,T Baseball: Clemson v. Florida State.
- April 27 T Tennis: Clemson v. Duke University

April 28	W	Arts & Crafts, YMCA, 8 p.m. Newcomers Group.
April 29	Th	William C. Ackerman (Illinois State Water Survey) will lecture on the "International Hydrologic Decade." 7 p.m., CE Auditorium.
April 30	F	Gamma Sigma Delta banquet. John Harms (Kiplinger Newsletter) will speak. 7 p.m., Clemson House.
May 1	S	May Morning Breakfast, 7-10 a.m., Clemson House. Buffet style. Everyone cordially invited. Tickets may be secured at door.
May 1	S	Tennis: Clemson v. Univ. Nor. Carolina.

Engineering Examination

The Engineer-in-Training examination is scheduled for May 8. Application should be made through the office of the Dean of Engineering, Riggs Hall (654-2421, extension 224).

Bird Club to Meet

The Carolina Bird Club will meet at the Clemson House on April 30 and May 1. There will be meetings at eight in the evening on Friday and Saturday. Some business will be transacted but the meetings will largely deal with wild life and conservation.

On Saturday morning there will be a field trip starting at about seven o'clock. Guides who know birds and know the territory will lead groups. Saturday afternoon more informal trips can be planned.

Around the first of May the bird population in the Clemson area is at its peak as far as varieties go. Most of the winter residents are still here. Many of the summer residents are just arriving and a great variety of transients are passing through on their way to their northern nesting grounds.

Visitors will be welcome at all meetings. You may wish to join. If the cost was any less it would be free. This will be the third time the Carolina Bird Club has met at Clemson.

Report of Actions of the Faculty Basic Research Committee

1. The Faculty Basic Research Committee met in the Graduate School office at 4 p.m. on March 25, 1965. Members present were: C. V. Aucoin, M. A. Boone, F. I. Brownley, C. Gum, H. H. Macaulay, J. E. Miller, B. R. Skelton, H. H. Wilson and M. A. Wilson.
2. The Committee voted to make additional allotments of \$164.11 to accounts which were overdrawn.
3. The Committee voted to make 5 new allotments for research, as follows:

<u>Researcher</u>	<u>Project</u>	<u>Amount</u>
William Beckwith	"The Measurement of Turbulent Velocity Profiles of Water Flowing in Tubes"	\$600.00
Robert S. Lambert	"The Loyalist of South Carolina in the American Revolution"	20.00
Virginia O. Bardsley	"The Irish on the Eastern Frontier (through 1819). (A previous award was made to Mrs. Bardsley for this project. This award is in addition to the former one).	500.00
Paul Birkhead	"Stromatoporoidea of Missouri" (A previous award of \$300 was made to Mr. Birkhead. This sum is in addition to the former award).	300.00
W. B. Herlinger	"Grundriss Der Deutschen Literaturgeschichte"	850.00

Clemson to Sponsor HEW Language Institute in France

Clemson University has been asked to assume administrative responsibility for a Health, Education and Welfare Institute to be held this summer in France for sixty high school teachers of French. The University has agreed to the undertaking.

Dr. Sanford Newell of Converse College will be director of the program. He has directed six language institutes in previous years.

The faculty of the Institute will include Dr. Newell, Mrs. Elizabeth Epting (Converse), Miss Marilyn Risko (Clemson), Dr. Jean D. Charron (Univ. of Kentucky), Mrs. Jeanne Palyok (Dreher High School, Columbia), Dr. Clifford Leonard (Cornell), and nine French Nationals. The secondary teachers who will attend as students have been selected and are from throughout the United States.

Special Note

Last month professor Alexander M. Buchan (English) of Washington University, St. Louis, printed an article on college students in his University Alumni Magazine. The article was later reprinted in the National Observer. Dr. Buchan has granted permission for his article to be used in the Clemson Newsletter, and the editor expresses gratitude to him for this courtesy.

By ALEXANDER M. BUCHAN

Associate Professor of English

WHAT HAPPENS TO MY STUDENTS?

Alexander M. "Sandy" Buchan for 35 years has exhibited an unusual concern for his students at Washington University, making him a memorable campus figure to hundreds of alumni. In this article, he raises a number of questions about four "accepted" changes taking place in American colleges and universities. One of these questions concerns the not altogether desirable effects of the academic and parental pressures on today's students.

THE QUESTION-TITLE of this article is a "stop beating your wife" kind of question. The safe answer is, "Your Honor, I wouldn't know." If you expect a St. Louis version of Mary McCarthy's *The Group* or an account of the misbehavior of the class of 1934, then you are going to be disappointed. For one thing I don't have Mary McCarthy's literary ability, and I have little of her cocky liking for clawing the faces of her friends.

A much better answer than mine could be given by any graduate student in sociology who put a little work into it. Or by Arno Haack's office, because through his office pass more students in a week than pass through mine in half a year. A dean "processes" students and gets to know a great deal about them. The difficulty of the teacher is this, that, in any one year, he has time to know only a handful of the students he teaches. Almost all of the conferences are brief and reveal nothing of the student to the teacher, and little of the teacher to the student. So his knowledge is very partial indeed. If he ventures to make general statements about his own students, or about students in general, he is, in my thinking, a rather daring fool. The evidence for judging in any satisfactory way is not available to the individual person who works on the campus. So I start off by suggesting that I am just a teacher, not in any way an authority on students.

Why do I ask the question? Because Washington University and the society it draws upon are undergoing a number of radical changes, and, even if the changes are inevitable and may be ultimately for the good, the process of adjusting to them is always hard, sometimes quite harmful, and frequently overlooked.

Let us pick out four of these changes for a cursory mention. The first has to do with the increasing size and wide-ranging recruitment of this university as well as

other universities of the country. Colleges are growing much larger and are taking their students from a much wider area than before.

The second change has to do with the kind of homes from which our students come—your home, my home—and the pressures arising in these. The pressures upon young people are increasing because not just one parent, but both parents may be college graduates.

The third change has to do with a movement noticeable throughout the country, a drive for what is called excellence. This quality of excellence is quite nebulous, really. It usually means the kind of distinction best exemplified by the person advocating it at any given moment. What he is striving to say is, "I want other people to be like me." If he is a scientist, he wants excellence in science. If he happens to be a man of business, he thinks of excellence in terms of a top job and a large salary like his own. In the humanities, we think of excellence as verbal fluency and sensitivity, qualities not needed, perhaps, in science and business. Excellence is a strange word, and can be a dangerous word when used in the context of education.

The fourth point is that our society now presents for young people, as undergraduates looking forward into the future, too many opportunities. There is a prospect ahead of every bright college student of a bewildering display of possible goals. Many young people, including some of the brightest, are not sure just which goal to choose, which one to devote themselves to.

Not so long ago Washington University was a comparatively small and rather local institution. It had some national prominence, particularly for its Medical School and for one or two departments in the college, but it was not widely known. Its modest size did not mean that the

education it provided was inadequate; it was very good even in those early years. But it was a local institution with a narrow range of recruitment. The faculty was small in those years. I can remember one large table in Lee Hall around which representatives of the sciences and the humanities used to meet regularly to eat lunch and argue and discuss.

Nowadays at Washington University there is no central meeting-place for the faculty. We have here on the campus not the so-called two cultures of C. P. Snow, but about a dozen cultures, all following their own independent path. For example, over in McMillan the physicists and chemists have their own little room in which they discuss the National Science Foundation and how to devise ingenious projects for getting more funds. We in the humanities may be free to attend, but frankly we know very little about the problems and would probably ask irrelevant questions if we went there. Once a day, a group from our School of Business takes its own table in the cafeteria and does not expect anybody else to sit alongside. There is hardly ever a visit to those upper levels of the campus by anybody from the Schools of Art or Architecture. We seldom see those people and would not recognize them if we did. There used to be a hospitable cafeteria down in the Art School where those of us on the hill could sit and talk with art and architecture faculty and with students in their smocks. And we had a wonderful time. Now we are like the cliff-dwellers on Mesa Verde, each division in its own cave—and the cave of the humanities may be the darkest and most remote of all.

This process of isolation is happening on every campus that I know, and I know a good many. We have an atomized faculty. Each small element goes its own way without a chance to react upon any of the others. It used to be said that a university was a community of scholars. The appropriate phrase now is a disunity of scholars—a disunity, because no scholar in any one area has an easy and obvious way to know his colleagues in other areas. What is the effect of this on the students? My colleagues and I can take care of ourselves, but there are possibly some harmful effects on the students.

A dreadful thing is happening here. It seems to be possible, on the busy modern campus, with professors pursuing their own affairs, for many students to earn a degree without ever getting to know, in a personal way, any one of their professors. And it is getting to be more and more inevitable as the years go by. It isn't a tragic circumstance. Knowing a professor as a person is not that important. Professors are no better people to know than street cleaners or real estate operators, but there do arise situations, during the four years of an undergraduate course, when knowing a professor well enough to ask him for a recommendation may have considerable value. For instance, it is impossible now to enter any graduate school without definite recommendation from former instructors, and a recommendation is not merely a process

of racking up the student's grades. From reading any testimonial, a dean should recognize that the teacher knows the student and that the recommendation is reliable. After many years of handling this kind of form, we learn the difference between the professor who lists the grades and puts down a simple statement about academic excellence and the other teacher who adds to this academic rating one which is his own and personal, which has knowledge and intimacy behind it.

As a college grows in size and importance, we easily forget the simple virtue of a free and open pathway between the student and the instructor. One of the great merits of the American college when I came into it a good many years ago was that this pathway was wide open, easy, and available. Now we are turning to another system in which this pathway seems to be getting blocked. It doesn't exist any more because the professors are too busy, and the young people are too scared to approach them.

Washington University, then, like other institutions of its kind, was once a local college. The students came by streetcar, some of them walked, some biked, and most of them studied at home. This may not have been an ideal set of circumstances. The home folks, very often, got into the students' hair; they always did, and they still have a tendency to. When young people of college age stay around too long, inevitably the parents become a burden.

TODAY WASHINGTON UNIVERSITY selects its young people from almost every state in the Union and from many countries. They are housed comfortably in dormitories. Programs are arranged for them, and, if you are interested in knowing about these, you can call Burton Wheeler and he will tell you about the Forsyth Houses Program. But our new plan overlooks a very important fact. These newcomers from Texas and Colorado and Ohio and New York are as much local kids as the old students used to be. Only they are much farther away from home. Each one has his roots of affection and early growth in a place just as close to him as St. Louis is to St. Louis children, but that place is no longer near at hand.

There is no need to get too sentimental about this, and I don't. Quite often these young people are in this out-of-town college of their own choice. They want to be away from home, and the majority of them should be. Yet it takes only a month or two of rigorous and lonely studying to make those students realize that the break with their home locality can be quite bitter. There isn't the old refrigerator to turn to for a sandwich and a glass of milk, no dad to hail when he comes in from the office, no fussy mother to gripe at. All of those ties have been broken, and the break is just as sharp for the kid from Brooklyn or Houston as it is for the one from Webster Groves. Though they grow out of it, moving away from the home town and the home folks can make for lonely evenings. It was no chance that a well-known book called *The Lonely Crowd* was written by a college professor,

not so much out of his knowledge of our society, but out of a college community. In our brand-new residence halls, young men and women first learn how lonely they can be.

Now let us look at the homes from which our students come. There is no doubt in my mind that the American home, the type of home from which we draw students, is a perfectly wonderful institution. Dad is usually a good earner. Mother, in many cases, has a college degree. With or without a degree, she manages the details of her many tasks with intelligence and remarkable efficiency, as the *Ladies Home Journal* is fond of pointing out. Most of the students come from homes in which their every need was met even before it became a need. They have the best of schooling. They have good food and clothes, with pocket money for almost any essential and a certain amount for luxuries. They are fortunate, too, in having their study habits encouraged. Good grades are approved of and bad grades deplored. They receive every bit of encouragement toward good work and decent behavior.

It used to be, however, that in any family there was a division of responsibilities between the two parents. If mother attended to the shopping and feeding and keeping things clean, then dad was the one who kept the children in order. Or the other way around, depending on the family. Mother usually did a great deal of the practical managing of the home. Dad was called in to lay down the discipline, to insist, "You get to your books, Johnny!" He was the court of last resort with regard to discipline. The trouble is that the majority of our youngsters now carry two parents on their neck, both of whom have college degrees. They keep a careful eye on grades and expenses and practical plans for college. This shared responsibility is a fashion heartily approved of by educators, especially in high schools.

ALL OF THIS CARE IS GOOD, and yet, to quote a phrase from Tennyson, "One good custom can corrupt the world." There is a hazard here that, as a child grows up, he must fulfill the expectations not of one person but of two to whom he is tied emotionally in a very strong way. When dad was the only one to lay down the law, it was easy to ignore him because he was often too busy with work to care much about grades; but, when mother insists too, there is no escaping.

In the old days a boy was lured into medicine by his doctor father. Now both parents will expect him to go into medicine. It has become harder for him to say, "No, I'd rather be a teacher or a real estate agent or an engineer. I don't want to be a doctor." We are compounding the pressure that we lay upon our children, and it is heart-breaking to watch it show. Young folks weep in my office because they are disappointing not one person but two, both of whom they like. I am suggesting that the high hopes and fears and ambitions of the nice American home may quite easily be a serious drag on a young person's

ability to make his own choice, to seek his own path, to be, as far as is possible, his own man.

Our third change comes from an insistence on what is called the "cult of excellence." Schools are raising their standards and colleges their entrance requirements, while industry and the professions are demanding more and more training and more advanced degrees. Things spiral with every day that passes. A concerted effort is made to have everybody work "to his highest potential." While there is something admirable in this frenzy, we may be facing a dangerous situation. The parent feels the pressure when he notices on the report card that Johnny or Suzie is making a raft of C's. And that parent, having been in college, recognizes that no respectable school will accept a son or a daughter who makes a raft of C's. It is a simple fact of academic life, too, that a B average is necessary for any kind of graduate work, and most of us who have been to college are interested in having our children go on to graduate work or into a professional school.

There seems to be no evading this type of academic and social pressure. In our society there are just so many prizes to go around, so many honors to be won, so many places to be filled near the top, and the competition for the prizes, the honors, and the places becomes a trifle fiercer every year. Increasingly, as I teach, I become concerned, not about the young people who will win the prizes and earn the honors, but about the far greater number of students who will never have a prize or an honor in a society that judges them by this simple fact. They are the large proportion of our students. The inequity became vividly noticeable to me once in a meeting of an honorary group here, Omicron Delta Kappa, of which I happen to be a member. One evening, after we initiated new members, we wondered how many of the students on this campus had the chance to belong to ODK or to Mortar Board or to Phi Beta Kappa. Even to us, it was astounding to realize what a small percentage of students can ever receive one of those honors.

As the competition becomes fiercer and receiving a prize becomes the measure of ability, then never getting a prize at all becomes almost a stigma, like the heartache of the girls who are not accepted in a sorority. It is easy for us, looking at this question, to say, "Well, they ought to be happy at the success of the others. They should cheer the victors as all St. Louis cheers the Cardinals." But to cheer is not easy, if you are in the game yourself as one of the participants, and a loser.

It is part of education, as Wordsworth, that wise person, once put it, "to live in reconciliation with our stunted powers," to learn to get adjusted to things we can't do as to things we can do, to find out that there are some things we can not always do well. But it is a bitter lesson for a young person as an undergraduate, and the more the competition increases in intensity, the harsher this lesson is apt to be. We are setting up constantly higher

WHAT HAPPENS TO MY STUDENTS?

levels of this frightening abstraction called excellence, and we are increasing directly with this the guilt and the anguish of many young people who, fine as they are, can not meet the demand of specialists in every branch of knowledge. Must we give up the sandlots of academic life in an attempt to make every student a major league player? That appears to be exactly what we are doing.

The pressure can be dreadful and frightening. There is an insistent obsession with grades. It used to be that C was a creditable grade, and, if you were interested in going out an evening or two with a boy, you could forget your assignment and make a C or a B, as the dice of an exam fell. I believe this to have been a wholesome attitude, this willingness to sacrifice a little bit of excellence along one narrow line for the sake of a broader purpose. On campuses now, competition is geared to the abilities of the brightest students. When a teacher grades any of his classes, he soon finds out who are the bright ones, and to two or three of those he gives A's. All of the others compete with these few who make the running, and woe to the ones who lag behind. Since the few have IQ's way up in the 170's and 180's, the pace becomes merciless.

SO WE HAVE ON THIS CAMPUS, once a month, "exam jitters" as I call them. Twice every year we have an epidemic of them, in January and in May, with a resulting run on the Health Service by youngsters who come down with colds and tiredness and mononucleosis and the other student ailments. Sickness is often a direct result of the intense pressure under which they operate.

The worst result of this insistence on excellence lies in a mood fairly common on campuses that study is always an unpleasant chore, like a sword of Damocles suspended over the head. There is an unceasing pressure to get work done and grades earned—earned by some arbitrary standard of academic prowess. Hard study might be fun if it were not for the incessant reckoning that has to be made. Across every campus move hundreds of young people who, in their attitude towards learning, are as stale as overtrained athletes, too tired, for lack of any remission, to rise to the challenge of a new idea.

Our fourth change has to do with the wide ranging choice of options available to any bright young person in this amazing society of ours. Any reasonably bright boy or girl moving towards graduate work has an immense number of career options ahead of him or her. The other day I saw a bulletin of the Indiana Department of Health listing fifty different job options in the area of health only, and at least seven-eighths of these were open to girls as well as boys. Students know something of these riches, and they are bewildered. As a result, many of them are slow to find an academic direction that will lead to a career. In the sophomore year, they find it hard to pick a "major," and they move from one major to another on a whim, because there is this ample choice. Some time around March

and April, every year, there occurs what I call the "second semester junior year slump." It is an affliction arising from a suspicion that a major chosen is not a very happy one. Accompanying it is a trying sense of drift and desperation, because those older students know they should make up their mind on a particular direction, but they do not like courses they are taking, and they drift from one class to another aimlessly. Some of them, unfortunately, run away from the despair by getting married—which is usually the worst way for a student to escape. Even among our graduate students, we find a willingness to put off the decision about choosing an area of study or getting a dissertation done. They postpone the choice from year to year, and the period of study for the Ph.D. in the humanities grows longer and longer.

What can be done about these problems I don't know. The longer I teach, the more clearly I realize that the row of grades which I put down in a notebook is not telling me—or anybody else—much about my young people. Behind this row of figures lies a bewildering confusion of personal dilemmas, interests, tensions, and desires, all of which have some relevance to this business of education for which I happen in a small way to be responsible. The grades are not a reliable indicator. In our society, reaching toward literacy, we forget that a diet of ideas, whether about literature or science or society, is really prison fare to the average healthy young person. It is like those weight-reducing substances that come in cans, excellent for inert people of middle age, capable of keeping life going, but unpalatable to the hearty taste-centered appetite of youth. Ideas and statistics are not natural or wholesome fare for young folk. Youth needs to have any idea salted down and modified and made palatable and interesting in terms of attitudes and desires that lie deep.

If we look at the four goals that most of us pursue, they are in the end very simple. Making a living is the first one. Being useful in some way is another. Having some individual quality of excellence all one's own is a third: whether it is a great excellence or a small is not relevant. We tend to overlook one of the most essential goals, the fourth. As age and tension increase, there arises for all of us a need to have the wherewithal and the capacity to escape, to get away. Not back into work or the pursuit of excellence, but into the relaxation for mind and spirit out of which maturity comes. And we are giving our young people too little time for this relaxation. Study is only one part—and the older I get I think not necessarily the more important part—of this process that goes on here for several years. A great deal of growing-up has to be done, and our best growing may occur during the unhurried hours when we are not driven from task to task, the hours of free time and leisure when, quietly, things soak in. Why should we deny our young people the calm hours in which, above the tumult and the shouting, they hear the still small voice within themselves?

GRADE-POINT RATIO TABLES

CUMULATIVE GRADE-POINT RATIOS OF ALL STUDENTS ENROLLED FOR THE
SECOND SEMESTER 1964-1965 (Exclusive of Graduates, Postgraduates,
Unclassified, and Second Semester Entering Students).

Cumulative Grade-Point Ratios	Students Enrolled for the Second Semester 1964-1965				
	Freshmen	Sophomores	Juniors	Seniors	Total
3.80 - 4.00	15	4	3	10	32
3.60 - 3.79	19	21	10	10	60
3.40 - 3.59	24	20	9	14	67
3.20 - 3.39	35	25	16	28	104
3.00 - 3.19	70	39	23	31	163
2.80 - 2.99	49	20	38	38	145
2.60 - 2.79	67	54	65	53	239
2.40 - 2.59	92	69	73	77	311
2.20 - 2.39	91	86	72	100	349
2.00 - 2.19	100	94	95	135	424
1.80 - 1.99	91	116	101	186	494
1.60 - 1.79	109	129	172	103	513
1.40 - 1.59	178	149	24	0	351
1.20 - 1.39	189	28	1	3	221
1.00 - 1.19	181	6	0	0	187
0.80 - 0.99	112	3	0	0	115
0.60 - 0.79	76	1	0	0	77
0.40 - 0.59	39	2	0	0	41
0.20 - 0.39	23	1	0	0	24
0.00 - 0.19	17	2	0	0	19
Total	1577	869	702	788	3936
Median	1.53	1.98	2.09	2.14	1.95
Mean	1.74	2.12	2.21	2.29	2.02

RESULTS OF GRADUATE RECORD EXAMINATIONS INSTITUTIONAL TESTING PROGRAM

The Graduate Record Examinations were given on March 16 and 18 to 567 candidates for graduation in June, August, and December 1965. In addition, scores of 47 candidates for graduation who took the examination under the National Program are included in the aggregation. The Engineering Advanced Test was given to all prospective Engineering Graduates. Arts and Sciences students took Advanced Tests in their major fields as they have done for several years.

As an aid to evaluation, means have been computed on the Aptitude Test and Advanced Tests by Colleges, Schools, Departments, and major areas as appropriate. Comparisons with 1962, 1963, and 1964 totals on the Aptitude Tests are included. These data are as follows:

APTITUDE TEST

University

	1965	1964	1963	1962	1961
Verbal	424.3	443.4	417.1	444.7	401.5
Quantitative	567.1	555.8	553.2	529.8	541.9

Colleges and Schools

College or School	No.	Verbal				Quantitative			
		1965	1964	1963	1962	1965	1964	1963	1962
Agric. & Bio. Sci.	108	377.1	398.1	379.5	403.5	523.4	514.6	486.6	491.6
Architecture	22	405.9	496.4	384.4	432.1	558.6	594.3	547.5	529.5
Arts & Sciences	135	477.9	467.2	455.0	470.0	542.0	541.3	539.7	515.2
Engineering	209	438.2	464.1	428.6	459.2	621.5	612.7	624.0	592.4
Ind. Mgt. & Text. Sc.	140	391.3	426.6	406.1	407.3	545.2	526.0	532.2	495.9

Departments

Department	No.	Verbal				Quantitative			
		1965	1964	1963	1962	1965	1964	1963	1962
Agric. & Bio. Sci.									
Agric. Econ.	7	372.9	382.5	380.9	441.9	522.9	490.0	447.3	516.3
Agric. Educ.	19	342.6	380.7	380.0	369.6	490.0	470.7	470.3	442.2
Agric. Engr.	4	407.5	425.0	350.0	396.4	637.5	595.0	576.7	569.3
Agronomy	11	354.5	406.0	362.0	430.0	495.5	525.0	492.0	526.7
Animal Science	11	387.3	360.0	378.2	352.9	516.4	442.5	452.7	428.8
Biology	17	432.4	424.5	400.0	452.2	520.0	492.5	488.8	488.9
Dairy Science	7	414.3	410.0	365.7	444.3	592.9	585.7	512.9	531.4
Entomology	1	460.0	450.0	320.0	370.0	490.0	465.0	375.0	530.0
Food Science	1	320.0	310.0			600.0	440.0		
Forestry	12	385.8	384.8	393.9	415.6	533.3	537.6	540.0	505.6
Horticulture	15	353.3	414.7	365.7	408.8	536.7	537.3	431.4	487.5
Poultry Science	3	286.7	315.0	330.0	410.0	450.0	435.0	450.0	490.0

Departments (Continued)

Department	No.	Verbal				Quantitative			
		1965	1964	1963	1962	1965	1964	1963	1962
<u>Arts & Sciences</u>									
Applied Math	12	548.3	482.0	461.3	495.7	681.7	614.0	688.8	607.1
Arts & Sciences	98	468.9	427.2	464.1	497.5	523.2	529.2	519.6	509.1
Bachelor of Arts			462.9	440.7			498.5	431.3	
Chemistry	3	586.7	515.0	484.3	505.7	593.3	655.0	601.4	575.1
Education	2	395.0	550.0	372.7	430.8	370.0	590.0	457.3	455.1
Physics	4	547.5	552.2	480.8	488.6	692.5	684.4	655.4	597.1
Pre-Medicine	16	453.1	472.6	456.7	538.6	526.9	523.7	574.7	507.1
<u>Engineering</u>									
Ceramic Engr.	12	436.7	488.1	454.7	451.8	605.0	596.3	635.3	582.1
Chemical Engr.	23	463.9	485.2	488.0	484.2	650.9	651.5	672.0	670.1
Civil Engr.	41	429.8	421.8	416.8	456.2	613.7	583.2	626.8	580.1
Electrical Engr.	64	455.6	474.9	412.6	466.3	632.3	619.1	617.6	588.1
Industrial Educ.	11	395.5	390.0	407.1	520.0	556.4	526.3	544.3	572.1
Industrial Engr.	7	475.7	470.0	420.6	438.6	627.1	588.3	590.0	554.1
Mechanical Engr.	51	416.1	481.9	426.5	449.8	618.0	633.3	629.2	594.1
<u>Ind. Mgt. & Text. Sc.</u>									
Industrial Mgt.	83	402.9	438.8	425.6	455.1	546.6	531.5	547.4	517.1
Textile Chemistry	8	430.0	419.0	401.9	480.0	612.5	543.0	546.3	605.1
Textile Management	46	368.3	408.4	366.5	399.5	527.4	507.0	493.1	477.1
Textile Science	3	320.0	398.3	446.7	430.0	600.0	581.7	600.0	552.1

ADVANCED TESTS

Test	No.	1965	1964	1962
Chemistry	4	550.0	527.9	531.1
Economics	24	487.9	505.7	462.1
French	1	480.0	380.0	330.1
Geology	4	497.5	470.0	555.1
History	15	488.0	488.3	491.1
Literature	38	459.2	433.1	448.1
Mathematics	22	531.8	435.2	471.1
Physics	3	563.3	544.4	474.1
Engineering	203	530.5	544.6	530.3
Agricultural Engineering	4	587.5	516.3	506.3
Ceramic Engineering	12	510.0	530.6	516.0
Chemical Engineering	24	553.8	578.1	542.0
Civil Engineering	41	500.0	482.3	506.6
Electrical Engineering	64	553.6	571.1	553.2
Industrial Engineering	7	530.0	515.0	485.0
Mechanical Engineering	51	515.5	564.3	536.6

Additions to Faculty

The following have signed employment contracts with the university since the April 1 issue of the Newsletter was printed:

- in Entomology-Zoology, William K. Willard of Hagerstown, Md., and Knoxville, Tenn., will join the department in July as an assistant professor. He will assist in research and will teach courses in ecology and radiation biology. He has an A.A. degree from Hagerstown Junior College, the B.S. and M.S. degrees from the University of Georgia, and the doctorate from the University of Tennessee. He is a member of Phi Kappa Phi and Sigma Xi. He is married, and his wife holds the Ph.D. degree from Tennessee.
- in German, Ernst Peutl of Vienna, Austria will join the department of English and Modern Languages in August as Visiting Assistant Professor. He has the doctorate from the University of Vienna and has done two years of advanced study at the University of Arkansas. He has taught English at the Federal Secondary School in Vienna (six years) and has been in charge of International Student Groups during three summers. He is married and has two children.
- in English, Robert T. Sorrells of New York City and Iowa City will join the department as assistant professor. He has a B.A. in history from Vanderbilt, a M.A. in English from Vanderbilt, and a MFA in English from the State University of Iowa. He has had three years of college teaching experience and has also worked as Assistant Director of the Development Office at Vanderbilt. He is married to the former Marjorie Baker of Caruthersville, Mo., and they have two children.

NEW RESEARCH CHIEF NAMED

Appointment of Edgar H. Clayton as director of planning and sponsored research, effective April 1, was announced by Wright Bryan, vice president for development. A petroleum engineer with wide experience in the U.S. and abroad, he is a native of Salisbury, N. C., and a graduate of the Colorado School of Mines. His career in the petroleum industry included the presidency of Petroleum Development Corp. in the Republic of Columbia. Working in the office of development, he succeeds Maj. Gen. A. W. Rigsby, now assistant to the president.

Military Security Official For Clemson

Stanley Nicholas (Adm, Engr) continues as the University officer who has responsibility for all matters concerning security clearance of faculty and staff and proper filing and disposition of all classified research contracts and papers. Mr. Nicholas is Director of Engineering research and assistant to the Dean of Engineering. His telephone extension is 349.

Gifts and Grants

The following gifts and grants have been received since the April 1 issue of the Newsletter was printed.

- from NASA to Clayton Aucoin (Math), \$20,000 to continue his work on development of a mathematical model of a space borne navigation system.
- from the Air Force to E. P. Stillwell (Phys), \$98,522 for a study of "elastic strain effects on galvanomagnetic and superconducting properties of metals."
- from NSF to S. F. Hulbert (Cer Engr), \$8,500 for a study, "Kinetics of high-temperature solid-state reactions."
- From California Chemicals Company, \$700 to the Edisto Experiment Station for fungicide studies.
- From Norwich Pharmacal Company, \$2,000 to the Poultry Department for a study on the air-sac disease.
- From Sylvania Electrical Products Inc., \$2,000 plus \$500 worth of electrical lighting equipment and supplies to the Horticulture Department to study response of floricultural crops to light quality.
- From Southern Nitrogen Company, approximately \$1200 worth of fertilizer materials to various departments of the Agricultural Experiment Station.
- From Diamond Alkali Company, \$1100 to the Botany Department and Edisto Station for evaluation of DAC 2787 as forage fungicide and soil fungicide on vegetables.
- From HEW (Public Health Service), effective after the end of fiscal year 1965, to R. F. Borgman (Food Sci), \$444,420 for a five-year training grant program.
- From the Oak Ridge Institute of Nuclear Studies to J. R. Stokely (grad student, Chemistry) \$4,500 as a doctoral fellowship in analytical chemistry, with tenure at Oak Ridge.
- From the Air Force to the University, eight two-year financial assistance scholarships to be awarded to Air ROTC Juniors. Each scholarship provides for tuition, fees, books and laboratory expenses.

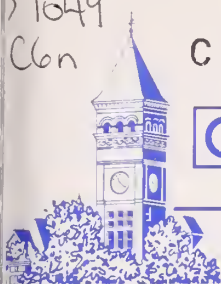
Personal Mention

- R. S. Lambert (hist) served as President of the S. C. Historical Association at its annual meeting in Charleston, April 27.
- H. H. Macaulay (Grad) has been appointed as Clemson liaison officer to the Danforth Foundation graduate fellowship program.
- W. E. Castro (EM) will return in August from study leave and resume his faculty position.
- L. R. Dirksen (EM) has resigned his position on the faculty, effective May 31.
- J. F. Pearce (Econ) has been granted an extension to his leave at the University of Alabama where he is doing graduate study.
- J. A. Yount (Engl.) has resigned his assistant professorship to accept a position at the University of New Hampshire.
- C. H. Farnsworth (Econ) has been granted leave (effective August 31) to do graduate study at the University of Missouri.
- J. C. Green, Emeritus professor of English who has been visiting professor at the University of South Carolina, will join the Middle Tennessee State University faculty in August.
- O. B. Garrison (agric.) attended the Southern Agricultural Experiment Station Director's Conference in New Orleans, La., March 22-24, where he served as chairman of the group.
- W. C. Mickelberry (Food Sci.) was recently elected Chairman of the Dixie Section of the Institute of Food Technologists at an Atlanta meeting. At the same meeting, A. L. Shewfelt (Food Sci.) was elected to serve a three-year term as Alternate Councilor.
- W. A. Shain (For.) presented a paper on April 14 at the Spring meeting in Atlanta of the American pulpwood Association.
- T. R. Adkins (Ento) presented a paper at the April 13-16 meeting of the American Society of Parasitologists in Atlanta.
- Stanley Baff (Econ.) has been granted leave for the forthcoming academic year to do graduate study at the University of Alabama.
- Alfred F. Newton (Ind. Educ) was a speaker on the program of the Oconee County Vocational Education Association Meeting, March 29, 1965.
- J. Houston Couch (Ind. Engr) was a speaker at the Foundry Educational Foundation's 18th Annual College-Industry Conference in Chicago on April 1-2. He spoke on "Curriculum for Foundry Educational Foundation Scholarship Students."
- Tah-Teh Yang (ME) has been elected by the faculty of the College of Engineering to replace A. C. Elrod as a member of the Research Faculty Council. Dr. Elrod's term expires in May. David Gentry (Tex) has been elected to the Council by the IM-TS faculty. He will replace Paul Robbins whose term also expires next month.

Personal Mention, continued

- Sam Willis (IM) and Joel Richardson (Tex) have been elected to three-year terms on the Academic Faculty Senate, replacing E. A. LaRoche and C. C. Davis whose terms expire.
- T. E. Efland (Tex) was chairman of a session at the April 13 Clemson conference of the American Textile Manufacturers Institute.
- E. S. Olson (Tex) has organized and will be coordinator for a one-week seminar on Color Measurement to be held at Clemson June 14-18. The seminar will be conducted by a staff selected from industry and the university and will cover the instrumentation and computation necessary for color measurement in textile dyeing. It will be the first program of its kind held anywhere and is expected to be of considerable interest to everyone involved with color in the industry.
- L. G. Rich (Adm., Engr) served on a review panel in Washington for the Public Health Service, April 6-7.
- H. G. Spencer (chem) has been invited to participate in the Gordon Research Conference on Organic Coatings (Tilton, N. Y., July 19-23).
- Joel L. Richardson (IM-TS) was reappointed by the Southern Textile Methods and Standards Association's Board of Directors to serve as Executive Secretary for the fiscal year 1965-66. This will be his fourth term in this position.
- F. C. Alley (Ch.E.) presented a paper before the Southeastern Section of the American Water Works Association in Columbia, April 7.
- R. C. Edwards has been elected 1966-67 Chairman of the Council of S. C. State-Supported College Presidents.
- Merrill C. Palmer and C. E. Kirkwood (Computer Center) will attend a special IBM short course in Atlanta, April 19-22. During May 18-27 Mr. Palmer will attend the Executive Board meeting of POOL and the International Federation of Informative Processing Societies in New York (He is a member of the Board). Mr. Kirkwood will present a paper ("An Operating System With Act IV") at the NY POOL Conference.

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C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 4, No. 16

May 1, 1965

CALENDAR: MAY 3-18

- May 3-14 Exhibition, Lee Gallery, School of Architecture. Represented in this exhibition will be work purchased by the Clemson Architectural Foundation in the Annual South Carolina Artists Guild Exhibit, the Purchase Awards of the Annual High School Art Show and other gifts and acquisitions.
- May 3 M Spanish language movie, "La Violetera." 7 & 9 p.m., Chemistry Auditorium. Small admission charge.
- May 4 T Baseball: Clemson v. South Carolina University.
- May 4 T Sage Club. 6:30 p.m., Clemson House.
- May 5 W Laicos Club, 8:15 p.m., Clemson House.
- May 5 W Honors and Awards Day. Classes dismissed in afternoon. Programs to be held by each of the schools and colleges. President Gordon W. Blackwell of Furman will address faculty and students at 2:30 p.m. in Tillman Auditorium.
- May 5 W Newcomers (Bridge), Clemson House, 8 p.m.
- May 6 Th James F. Lincoln (Chairman of the Board, The Lincoln Electric Co.) will lecture on "The Lincoln Electric Company Incentives," 2 p.m., Sirrine Auditorium.
- May 6 Th Woman's Club luncheon, 1 p.m., Clemson House.
- May 7-8 F,S Junior-Senior dances.
- May 8 S Junior-Senior banquet, Dining Hall.
- May 8 S Engineering-in-training examination. For information, call 654-2421, extension 224.
- May 10 M Forum Club, 7 p.m., Chemistry Building Conference Room. E. C. Coker will read a paper.
- May 11 T Fellowship Club ladies night. 6:30 p.m., Clemson House. Governor McNair will speak.
- May 11 T Newcomers to meet with Mrs. K. Hare (215 Wesley). Mrs. R. F. Poole will speak on "So You're Giving a Tea."

Calendar - con't.

May 11	T	University Band Concert. 7:30 p.m., Tillman Auditorium.
May 11	T	Academic Faculty Senate, 4 p.m., Olin Hall. Regular meeting.
May 12	W	Meeting of Research Faculty, 4 p.m., P & AS Auditorium.
May 12	W	Graduate Wives, 8 p.m., Clemson House.
May 13	M	French language movie, "Symphonie Pastorale." 7 & 9 p.m.. Chemistry Auditorium. Small admission charge.
May 13	Th	ROTC Recognition Day. Military Parade in afternoon.
May 13	Th	Dr. Kevin T. Potts, University of Louisville will speak on "Some Recent Studies in Heteroaromatic Chemistry." 4 p.m., Room 118, Chemistry Department.
May 15	S	Last day for reports on Graduate theses and oral exams.

University Band to Present Concert

The University Concert Band will make its final appearance of the year on Tuesday night, May 11, at 7:30 in the auditorium of Tillman Hall. The annual "Pop" Concert will feature a wide variety of light concert music, including selections from two Broadway shows, "Oliver!" and "The Unsinkable Molly Brown," selections from Prokofiev's "Lt. Kije," the "London Suite" by Eric Coates, and Johann Strauss' "Tritsch-Tratsch" Polka.

A new march, "The Spirit of Clemson University," written by Professor C. E. Bardsley (Agron.) will receive its first performance. The Triumphal March from Verdi's "Aida" will feature antiphonal trumpets, and James Johnson, a student from Furman, will be featured piano soloist in the first movement of Grieg's Piano Concerto. Admission is free.

Senior Day

President Edwards has approved a request that "Senior Day" be held from noon, May 6 through noon, May 7. Seniors will be excused from all class and laboratory activities for this event.

Course Preferences of Candidates for Admission in June and September 1965

<u>Major Course</u>	<u>Accepted Candidates</u>		<u>Other Active</u>		<u>Total</u>	
	<u>Men</u>	<u>Women</u>	<u>Candidates</u>			
Agriculture	31	2	19		52	
Agriculture Economics	0	0	4		4	
Agriculture Education	6	0	5		11	
Agriculture Engineering	11	0	8		19	
Agronomy	7	0	2		9	
Animal Science	4	0	6		10	
Biology	29	10	18		57	
Dairy Science	6	0	1		7	
Entomology	3	0	3		6	
Food Science	2	0	1		3	
Forestry	47	0	53		100	
Horticulture	1	2	8		11	
Poultry Science	1	0	1		2	
Pre-Veterinary	24	4	23		51	
	172	11.1%	18	13.1%	152	342 12.1%
Architecture	119	7	108		234	
Building Construction	2	0	6		8	
	121	7.8%	7	5.1%	114	242 8.6%
Arts & Sciences	126	51	170		347	
Chemistry	48	4	27		79	
Geology	2	0	2		4	
Mathematics	65	32	35		132	
Medical Technology	3	11	5		19	
Physics	47	1	10		58	
Pre-Medicine	128	7	57		192	
Pre-Pharmacy	7	1	4		12	
Science Teaching	1	0	3		4	
	427	27.5%	107	78.1%	313	847 30.1%
Engineering	260	2	143		405	
Ceramic Engineering	21	0	7		28	
Chemical Engineering	62	0	24		86	
Civil Engineering	103	1	77		181	
Electrical Engineering	136	0	78		214	
Industrial Education	1	0	3		4	
Industrial Engineering	20	0	15		35	
Mechanical Engineering	76	0	60		136	
Metallurgical Engineering	2	0	2		4	
	681	43.9%	3	2.2%	409	1093 38.8%
Industrial Management	124	1	106		231	
Textile Chemistry	6	0	6		12	
Textiles	20	1	28		49	
	150	9.7%	2	1.5%	140	292 10.4%
Total Expressing Major Course Choice	1551		137		1128	2816
Undecided	107	15	96		218	
GRAND TOTAL	1658	152	1224		3034	

Additions to Faculty

The following additions to the faculty for the forthcoming year have completed contract negotiations since the April 15 Newsletter was printed.

--in Mathematics, Thomas Proctor Gilmer will join the faculty in August as Assistant Professor. From Winston Salem, N. C., he has a B.S. in nuclear engineering from N. C. State, and a M.S. and Ph.D. in mathematics, also from N. C. State. He has had five years experience as a college teaching assistant and one year as an instructor. Additionally, he has had four years experience in the nuclear power division of the Ingalls Shipbuilding Corporation. He is married to the former Nancy Thompson of Saluda, N. C.

--in Mathematics, Joel V. Brawley, Jr. of Raleigh, N. C., will join the department in August as an assistant professor. His B.S., M.S., and Ph.D. degrees are from North Carolina State University where he has had four years experience as a teaching assistant and one year as an instructor. He is a member of Phi Kappa Phi, Sigma Xi, Tau Beta Pi, and Pi Mu Epsilon. Dr. Brawley is married to the former Mary Frances Owen of Lincolnton, N. C. and they have one child.

--in French, Roy L. Coleman of Front Royal, Virginia, will join the faculty of English and Modern Languages as an Instructor. He holds the B.A. degree from the University of North Carolina where he has also completed residence work for his masters. His teaching experience includes two years on the college level and three years in High Schools.

Computer Center to Add Programmer

Hasell L. Coleman, Jr. of Charleston and Clemson will join the Computer Center in July as a programmer. He expects to graduate from Clemson in August. While a student he has for two years been president of the Clemson Chapter of the Association for Computing Machinery.

NSF Grants

The NSF grants listed below have been announced since the April 15 issue of the Newsletter was printed:

--to the College of Engineering, \$30,000 to apply toward the purchase of an analog computer.

--to various science and engineering departments, five graduate fellowships, valued at about \$25,000 (\$12,500 to students, \$12,500 to departments in which students major).

Personal Mention

--Clemson faculty and staff who represented their undergraduate colleges or professional associations on April 20 at the inauguration of Gordon W. Blackwell as President of Furman University were Robert C. Edwards, John S. Gordon, George C. Means, Jr., J. K. Williams, R. C. Harshman, M. A. Packer, Susan Delony, R. S. Lambert, G. H. Aull, Wright Bryan, and F. I. Brownley, Jr.

--The faculty of the College of Agriculture and Biological Sciences has elected E. B. Eskew (Agron), T. L. Senn (hort) and J. B. Whitney (bot.) to the Academic Senate for three year terms. The college faculty elected G. R. Craddock (agron.) and U. S. Jones (agron) to three-year terms on the Research Faculty Council.

--L. G. Rich (engr.) has been asked to serve as technical advisor to the S. C. Water Pollution Authority.

--L. H. Senn (ento.) served as chairman of the Southern Plant Board's annual meeting in Hot Springs, Ark., April 19-24.

--Clemson faculty members who read papers at the April 23-24 meeting of the S. C. Academy of Sciences in Columbia were A. S. Tombes (ento.), M. D. Farrar (ento.), M. A. Boone (pltry sci.), J. E. Halpin (bot.), Wesley Witcher (bot.), H. W. Graben (phys.), R. L. Chaplin (phys.), M. J. Skove (phys.), H. E. Vogel (phys.), E. P. Stillwell (phys.), Sang O. Park (I.M.), C. B. Thompson (econ.), J. W. Hubbard (ag.econ.), C. H. Whitehurst (I.M.), B. R. Skelton (econ.), L. E. Hill (econ.) and H. M. Corley (ag. econ.).

--David Gentry (TC) read a paper on April 26 at the Kansas City meeting of the American Association of Cereal Chemists.

--J. K. Williams (Admin.) presented the Conference Critique at the April 27 Atlanta meeting of the Southern Association of College and University Business officers.

--The faculty of the College of Engineering has met and elected John D. Antrim (CE), Richard C. Harshman (Ch.E.), and Robert A. Banister (E.G.), to replace Professors W. B. Barlage, W. G. Hudson and C. M. McHugh on the Academic Faculty Senate.

--The faculty of Arts and Sciences has elected as new academic Faculty Senators A. T. Hind (math.), Harriet Holman (Engl.), H. G. Spencer (chem.), M. S. Steadman, Jr. (Engl.), H. E. Vogel (phys.), and J. P. Winter (Engl.). A&S Senators whose terms end are J. L. Flatt, L. E. Hill, A. H. Holt, C. M. McGee, and M. A. Owings.

--Donald M. Bardwell (math.) presented a paper at the meeting of the Mathematical Association of America held in Winston-Salem, North Carolina, on April 9-10. At the same meeting, J. W. Kenelly and William Hare (math.) presented a joint paper.

--B. J. Prochaska (Math.) presented a paper at the Institute of Mathematical Statistics held in Tallahassee, Florida, April 29-30.

--W. J. Lanham (ag.ec.), L. E. Talbert (ag.ec.), and C. P. Butler (USDA) participated in a workshop on Price and Income Policies at North Carolina State University, Raleigh, April 21 and 22. Dr. Lanham presided at a discussion session on "Elements of a Micro-Macro Approach in Agricultural Policy Research."

Personal Mention - con't.

--K. N. Vickery (Adm.) has been elected to a two-year term as vice-president of the American Association of College Registrars and Admissions Officers. His election came at the conclusion of the Association's convention in Chicago, April 19-23.

--Robert W. Moorman (EM) has been elected Chairman of the Engineering Mechanics Division, Southeast Section of ASEE, for the year 1965-66.



C L E M S O N

Newsletter

NOT FOR PUBLICATION

Vol. 4, No. 17

May 15, 1965

CALENDAR: MAY 17-JUNE 4

May 18	T	Research Faculty Council, regular meeting. 4 p.m., Olin Hall.
May 19	W	Newcomers, Clemson House, 8 p.m. Bridge Group.
May 19	W	Laicos, Clemson House, 8:15 p.m. Bridge Group.
May 26	W	Newcomers. YMCA, 8 p.m., Arts and Crafts Group.
May 28-June 17		Exhibition at Lee Gallery, School of Architecture. Theses of 5th year architectural students: A display of architectural theses completed in the spring semester of 1965. Other student work will be on display.
May 28	F	Academic Faculty will meet in Brackett Auditorium. 11 a.m.
May 29	S	Graduation Exercises. Congressman M. Rivers will speak.

Emeritus Professor Dies

Mr. Charles L. Morgan, emeritus head of the Poultry Department and professor of Poultry Science, died Sunday, May 9, at his home in Brandenburg, Kentucky. He was 70 years of age.

Professor Morgan joined the Clemson faculty as assistant professor in 1919. He became head of the Poultry Department in 1926 and retained this position until his retirement in 1959.

Mr. Morgan held B.S. and M.S. degrees from the University of Kentucky and did an additional year of graduate study at the University of Wisconsin. He was the author of more than twenty research studies and had an enviable reputation with Clemson men as an excellent classroom teacher.

Memorandum:

To: All Faculty Participating in 1965 Commencement

From: M. A. Owings, University Marshal

1. The Faculty will assemble in the English-Math complex at 4:30 p.m., Saturday, May 29. Please report directly to your college or school marshal as indicated below:

Agriculture: Dr. J. M. Stepp--Hall of basement floor, English Classroom Building.

Engineering: Prof. I. A. Trively--Hall of basement floor, English-Math Office Building.

IM-TS: Prof. A. E. McKenna--South end of hall of 1st floor, English-Math Office Building.

Arts & Sciences: Dr. L. D. Huff--Hall of 1st floor, English Classroom Building.

Architecture: Prof. E. A. Gunnin--Hall of 1st floor, Math Classroom Building.

Platform Party--English Math Lounge (0-106) first floor, English-Math Office Building.

2. The Faculty are requested to observe certain uniformities respecting the clothing worn with academic attire:

- a. Women should wear dark dresses and dark shoes with low or medium heels. Men should wear dark shoes and preferably dark trousers. Coats need not be worn except in the case of those wearing Master's gowns; dark coats or blouses with dark sleeves are needed with these.
- b. Caps should be worn with the long point to the rear; the tassel should be hanging forward to the left.
- c. While marching, faculty and candidates should maintain an interval of one arm's length from the person in front.

SEASON TICKET APPLICATION FORMS FOR THE 1965-66 SPORTS SEASON

Season ticket application forms for the 1965-66 sports season have been sent to deans and directors for distribution to faculty and other employees of Clemson. Anyone who has not received an application should contact his dean or director or call the Athletic Ticket Office at extension 276. Priority for faculty and employees expires on June 10. Those leaving Clemson for the summer should be sure to complete applications prior to departing.

"Summer Semester" Courses on Channel 7 (WSPA-TV)

Again this year WSPA-TV, Channel 7, will carry "Summer Semester" program, beginning Monday, May 17, from 6:30 to 7:00 a.m., and will be completed on September 25. The course will be programmed Monday through Saturday.

The courses for Summer Semester will be "The Politics of Peace, a course in International Organization," taught by Abraham Yeselson, Professor of Political Science at University College at Rutgers, and "A New Birth of Freedom...Civil Rights and Civil Liberties" taught by Paul Tillett, Associated Director of the Eagleton Institute of Politics and Professor of Political Science at Rutgers.

Note from Water Resources Institute

The Clemson University Water Resources Research Institute has been certified as complying with the requirements of the "Water Resources Research Act of 1964" administered by the Department of Interior and is now eligible for both allotment and matching grants as such funds become available. The Directorate of the Institute is currently preparing a proposed program for fiscal year 1966. Project proposals for funding during fiscal year 1967 will be invited for submission prior to February 1, 1966. Faculty desiring further information should contact A. W. Snell, Head, Agricultural Engineering.

Extension Senate Elects New Members

Late in April the Agricultural Extension Service elected eight new members to its Senate. The new members and their divisions are:

Men Specialists: W. J. Barker

Pee Dee Men: E. C. Abrams--3 yr. term
R. C. DuBose--1 yr. term

Pee Dee Women: Miss Louise Heriot

Piedmont Men: J. K. Jones

Piedmont Women: Miss Sarah Cureton

Savannah Valley Men: O. W. Cain

Savannah Valley Women: Mrs. Alpha C. Jenkins

ALUMNI REUNION WEEKEND: RECEPTION, SEMINAR, BANQUET

Clemson faculty and staff and their wives are invited to attend an informal reception at the President's Home, Friday evening, June 4, from 8:00 to 10:00 p.m. President and Mrs. Edwards will be hosts to visiting alumni, their wives and guests, who will be on campus for reunion activities June 4, 5 and 6. Faculty and staff are invited to join in the activities whenever they can.

Four Clemson movies will be shown in the air conditioned student lounge, Friday afternoon, June 4 at 2:30. You may come and go as you wish, seeing one, two, three or all four movies. The program will include: "This is Clemson," "A Challenge Met," NBC-TV's "College Bowl" (Clemson vs. Fairfield University) and "A Letter From Clemson."

The fourth annual Alumni Seminar will be conducted this year on Saturday afternoon, June 5, in the Chemistry Auditorium, following the alumni General Assembly which begins at 2:00 p.m. The seminar program is planned for alumni, wives and guests and is coordinated by the office of the Dean of the University.

Tickets are now on sale at the Alumni Office in the Trustee House for the Alumni Banquet to be held in the University Dining Room, Saturday evening, June 5, at 7:00 p.m. Faculty and staff may purchase their tickets in advance or obtain them the day of the banquet on the loggia of the Student Center. Five alumni will receive signal recognition at the banquet as recipients of 1965 Distinguished Alumni Awards. They are: Goode Bryan '18 of Greenville, William H. Grier '23 of Rock Hill, E. Hugh Agnew '16 of Starr, Walter Cox '39 and George H. Aull '19 of Clemson.

Special Note on the Payroll

Those academic faculty members who chose Plan "A" method of payment during the 1964-65 academic year will receive their last checks on May 31, 1965.

In order to provide continuous insurance coverage during June and July and to facilitate the collection of insurance premiums, the Accounting Division will make double deductions from the April check and the May check.

Changes in coverage which cause premium adjustments in June and July will be handled on a personal contact basis. Any overpayment will be refunded by the Accounting Division and any additional premium due will be collected from the insured by personal check.

For those faculty members who selected Plan "B", separate payrolls will be processed for the ninth, tenth, eleventh, and twelfth checks. These checks will be available May 31, 1965. However, no insurance deduction will be made from the twelfth check.

Special Note on the Payroll- con't.

You will note that no provision is made above for deducting the August insurance premium. For those faculty members who return to duty at the beginning of the 1965-66 academic year, a payroll deduction for the August insurance premium will be made from the August check (the first payment for first semester).

Plan "A" or Plan "B": Anyone not returning to duty at the beginning of the 1965-66 academic year who wishes group insurance protection for the month of August, 1965, must send to the Accounting Division, a personal check for one month's premium, made payable to the appropriate insurance company. Separate checks are required if two or more companies are involved. Such checks must be received in the Accounting Division on or before August 1, 1965.

REPORT FROM THE FACULTY SENATE

The Academic Faculty Senate of Clemson University held its one-hundred-and sixth meeting at 4:05 p.m. on April 13, 1965. President John Miller called the meeting to order.

Professor Means, Chairman of the Policy Committee, distributed copies of a proposed "Evaluation of Academic Personnel" form. This form, if adopted, would replace the one currently in use. The Faculty Senate study of this form was suggested by Dean Williams. After some discussion the Faculty Senate voted to forward the form to Dean Williams as a recommendation from the Policy Committee only, with a letter of transmittal summarizing the wide range of comments made by various members of the Senate.

A proposed amendment to the By-Laws of the Faculty Senate was submitted to the Senate. It reads as follows, "The Faculty Senate shall hold its first regular monthly meeting on the first Thursday in September at 4:15 p.m. and shall hold its regular monthly meetings thereafter at such times as designated by the Committee on Committees. The Committee on Committees will announce the schedule of meetings for the year at the September meeting." The motion to recommend this amendment for approval by the Academic Faculty passed unanimously.

Professor Shewfelt reported for the Welfare Committee the reactions of the faculty as a whole to the proposed Funeral Society. A questionnaire was sent to all faculty members, and the replies indicate considerable interest in such a society and a desire to belong to it. At the May meeting of the Senate, the Welfare Committee will present its recommendation for action on this matter.

President Miller gave several items of information, telling the Senate that the Academic Deans are now working on the suggested reading list for prospective students, and that the Dean of the University received the endorsement of the Faculty Senate of the Student Senate recommendation of a 1-1/2 day reading period before examinations.

There being no further business, the meeting was adjourned.

Report of Meeting of the Research Faculty Council

A regular meeting of the Research Faculty Council was called to order April 20, 1965, at 4:00 p.m. in Olin Hall auditorium.

P. E. Robbins announced that the annual research faculty meeting will be held May 12, 1965, at 4:00 p.m. in the Plant and Animal Science auditorium. A review of the Research Faculty Council's accomplishments for the past year will be made at this time. Dean J. K. Williams will give a brief review of the University research program.

A motion was made and passed that the revised "Evaluation of Research Faculty Members" be forwarded to Dean J. K. Williams.

A. C. Elrod, chairman of the policy committee, suggested that a section be added to the Clemson University catalogue describing the research program at Clemson University. This matter was returned to the policy committee for drafting.

The need for more research equipment and the repair of present equipment was emphasized. It was suggested that the executive committee seek advice from the electrical engineering department as to the qualifications necessary in such a repairman.

A motion was made and seconded that a recommendation for a Central Chemical Store be submitted to the University administration for their consideration. The motion carried.

The following proposed amendment to the by-laws of the "Manual for faculty members" was passed:

Under Section 1, in Item 2 - It is proposed to indicate a footnote reference immediately following the word research as it appears the first time in the paragraph. Said footnote shall read, "A working definition of research appears in Section 3 of this Article".

Section 3 Definition of research:

Research consists of any activity which is undertaken with the objective of "pushing back the frontiers of knowledge." It involves the diligent seeking after new facts and/or principles through investigation, inquiry, scrutiny, examination, and interpretation. This includes the consideration of areas not previously investigated and the re-examination of basic concepts or principles for application to new processes. The term thus implies a degree of originality in the investigator's approach to a problem.

The meeting was adjourned at 5:35 p.m.

Absences: F. J. Lindstrom, J. B. Pitner, E. S. Olson, J. J. Skove, A. E. Schwartz, and Wesley Witcher.

ACADEMIC FACULTY SENATE ROSTER, 1965-1966

<u>Agriculture</u>	<u>Dept.</u>	<u>Campus Address</u>	<u>Campus Telephone</u>	<u>Term Ends</u>
A. L. Shewfelt	FdSci.	216 P&AS	257	1966
M. A. Boone	PltrySci.	134 P&AS	222	1967
J. M. Stepp	AgEcon.	101 Long	338	1967
E. B. Eskew	Agron.	205 P&AS	297	1968
T. L. Senn	Hort.	162 P&AS	220, 360	1968
J. B. Whitney	Bot.	218 Long	329	1968
<u>Architecture</u>				
E. A. Gunnin	---	109 Arch	228	1967
Edward Pinckney	---	116 Arch	228	1968
Richard Reep	---	110 Arch	228	1968
<u>Arts and Sciences</u>				
J. G. Dinwiddie	Chem.	303 Brackett	235	1966
J. E. Miller	Phys.	103 Physics	253	1966
J. R. Sullivan	Math	206 Engl-Math.	387	1966
C. A. Reed	Phys.	102 Physics	253	1966
Mrs. H. H. Hill	Hist.	102 Hardin	296	1967
L. L. Henry	Engl.	325 Engl-Math	383, 384	1967
C. Q. Brown	Geol.	102 Geol.	291	1967
H. M. Felder	Engl.	204 Engl-Math.	383, 384	1967
A. T. Hind	Math.	109 Engl-Math	387	1968
Miss Harriet Holman	Engl.	225 Engl-Math.	383, 384	1968
H. G. Spencer	Chem.	106 Brackett	239	1968
M. S. Steadman	Engl.	302 Engl-Math	383, 384	1968
J. P. Winter	Engl.	0-201 Engl-Math	383, 384	1968
H. E. Vogel	Phys.	105 Physics	253	1968
<u>Engineering</u>				
W. L. Ball	EE	103 Riggs	227	1966
A. D. Lewis	ME	29 Riggs	229	1966
H. G. Lefort	CerE	Olin	304	1967
J. T. Long	EE	213 Riggs	227	1967
J. D. Antrim	CE	212 CE	246	1968
R. C. Harshman	ChE	203 Earle	357	1968
R. A. Banister	EG	315 Riggs	225	1968
<u>IM-TS</u>				
T. A. Campbell	Tex.	305 Sirrine	350	1966
J. J. Porter	Tex.	11 Sirrine	335	1967
Joel Richardson	IM	310 Sirrine	350	1968
Sam Willis	IM	103 Sirrine	332	1968

Curriculum Committee Report

The University curriculum committee and the Educational Council have approved the following:

1. new courses:

- Math 313, Statistical Methods I, 3 cr. (3,0).
- CE 443, Environmental Engr. Chem.I, 2 cr. (2,0). To replace CE 442.
- CE 444, Environmental Engr. Chem,Lab, 2 cr. (0,6). To replace CE 442.
- Phys 473, X-ray Crystallography, 3 cr. (2,3). To replace Phys. 555.
- IM 100, Introduction to Industrial Mgt., 0 cr. (1,0).
- IM 401, Marketing Analysis, 3 cr. (3,0). To replace IM 308.
- IM 409, Management Simulation I, 1 cr. (1,0).
- IM 500, Management Simulation II, 1 cr. (0,3).
- IM 506, Location of Economic Activity, 3 cr. (3,0).
- Econ 322, Legal Environment in Business, 3 cr. (3,0).

2. Changes in Agricultural curricula:

Agricultural Engineering Curriculum

- Move EM 320 from second semester junior year to first semester senior year.
- Move AgE 465 from first semester senior year to second semester junior year.
- Change EM 304 from prerequisite to corequisite for AgE 431.
- Change Bot 352 and Zool 101 and 103 from prerequisites to corequisites for AgE 465.
- Delete AgE 362 and AgE 465 as prerequisites for AgE 416.
- Delete AgE 465 and EM 320 as prerequisites for AgE 442.

Animal Science Curriculum

- Move An Sc 303 from first semester junior year to second semester junior year in all options.
- Change the title of An Sc 306 from Judging to Livestock Selection and Evaluation.
- Change the title of An Sc 405 from Advanced Judging to Advanced Livestock Selection and Evaluation.
- Change An Sc 353 from one credit (1,0) to two credits (2,0).
- Change An Sc 355 from two credits (0,6) to one credit (0,3).

Curriculum Committee Report

Dairy Science Curriculum

- Move Bact 402 from first semester senior year to second semester senior year in all options.

Forestry Curriculum

- Change For 202 from the second semester to the first semester and change the number to For 205.
- Change For 201 from the first semester to the second semester and change the number to For 204.
- Change For 203 from the first semester to the second semester and change the number to For 206.
- Change Zool 312 from the second semester to the first semester.
- Change For 301 from the first semester to the second semester and change the number to For 308.
- Change the number of For 303 to For 310.
- Change For 402 from the second semester to the first semester and change the number to For 401.
- Change For 403 from the first semester to the second semester and the number to For 410.
- Change For 405 from the first semester to the second semester and change the number to For 412.

Horticulture (Fruit and Vegetable) Curriculum

- Require Hort 405 in first semester of senior year in all options.
- Require Hort 451 in second semester of senior year in all options.
- Change Hort 456 from three credits (2,3) to three credits (3,0) and require in second semester of senior year in all options.

Horticulture (Ornamental) Curriculum

- Require Hort 451 in second semester of senior year in all options.
- Require Hort 460 in first semester of senior year in all options.
- Require Hort 302 in first semester of senior year in all options.

3. New curriculum for industrial management. The new curriculum will incorporate these changes:

- A. Three new courses in IM will be added.

IM 100 Introduction to Industrial Management..... 0 cr. (1,0)

IM 409 Management Simulation..... 1 cr. (1,0)

IM 401 Marketing Analysis..... 3 cr. (3,0)

- B. IM 308 (Marketing) will be deleted..... 3 cr. (3,0)

Curriculum Committee Report

- C. Two new courses in Graphics, EG 103 (Engr. Comm. & Design, 2 cr.) and EG 104 (Engr. Comm. & Design, 2 cr.) will be added. In the IM curriculum these will replace EG 109 Engr. Com. & Des., 3 cr. and EG 110 Engr. Com. & Des., 3 cr.
- D. A new course known as Legal Envir. of Business will be added and will be replaced by Commercial Law in the I. M. curriculum.
- E. A new course known as Statistical Methods I will replace Math 303 in the I.M. curriculum.
- F. IE 303 (Evaluation and Wage Incentive) will be deleted from the curriculum and IE 299 (Program Digital Com., 1 cr.) will be added.

The new curriculum will be:

INDUSTRIAL MANAGEMENT CURRICULUM

Freshman Year

<u>First Semester</u>			<u>Second Semester</u>		
Chem 101	Gen Chem	4	Chem 102	Gen Chem	4
EG	Engr. Comm. & Des	2	EG	Engr Comm	2
Engl 101	English Comp	3	Engl 102	Engl Comp	3
Hist 101	Am Hist	3	Hist 102	Am Hist	3
Math 106	Anal Geo & Cal	4	Math 205	Anal Geo & Cal	4
IM 100	Intro to IM	0	AS or MS	Basic	1
AS or MS	Basic	1			17
		<u>17</u>			

Sophomore Year

Acct 201	Prin of Acct	3	Acct 202	Prin of Acct	3
Econ 201	Prin of Econ	3	Econ 202	Prin of Econ	3
Engl 203	Survey of Lit	3	Engl 204	Survey of Lit	3
IM 201	Intro to IM	3	Govt 301	Am Govt.	3
Phys 201	Phys	3	Phys 202	Physics	3
Phys 203	Phys Lab.	1	Phvs 204	Physics Lab	1
IE 299	Pro Digital Com	1	AS or MS	Basic	1
AS or MS	Basic	1			17
		<u>18</u>			

Junior Year

Econ 314	Econ Theory	3	EE 303	Intro to EE	3
IE 307	Survey of Eng	3	Engl 304	Adv. Composition	3
IM 301	Cost Acct	3	IM 302	Ind. Management	3
Math	Stat Method I	3	IM 304	Quality Control	3
Psych 301	Gen Psychology	3	IM 311	Intro to Econ.	3
Approved Elective		3	Soc 301	Intro to Soc.	3
		<u>18</u>	Approved Elective		3
					<u>21</u>

Curriculum Committee Report

Senior Year

Econ	Legal Environment of Business	3	IM 402	Prod Plan Cont	3
Engl 301	Pub Speaking	3	IM 404	Managerial Econ	3
IM 401	Mkt Analysis	3	IM 403	Spec Problems	2
IM 408	Work Simplif.	3	Soc 405	Ind. Sociology	3
IM 409	Mgt. Simulation	1	Approved Elective		6
Approved Elective		6			17
		<u>19</u>			

4. A curriculum for the Associate degree in nursing.

The curriculum including new courses, is:

First Semester

<u>Course</u>	<u>Weekly Lecture hours</u>	<u>Weekly Lab hours</u>	<u>Semester Credit hours</u>
Fundamentals of Nursing I**	2	12	6
English 101 (grammar & composition)*	3	0	3
Integrated physical science I**	3	3	4
General psychology* (Psych 301)	3	0	3
	<u>11</u>	<u>15</u>	<u>16</u>

Second Semester

Fundamentals of Nursing II**	2	12	6
English 102 (grammar and composition)*	3	0	3
Integrated physical science II**	3	3	4
Introductory Sociology* (Soc 301)	3	0	3
	<u>11</u>	<u>15</u>	<u>16</u>

Summer Session (9 weeks)

Abnormal psychology (Psych 402)	6	0	3
Nursing (care of emotionally disturbed)**4	20	20	6
	<u>10</u>	<u>20</u>	<u>9</u>

Third Semester

Nursing (medical surgical)**	3	12	7
Principles of nutrition**	3	3	4
Growth & Development***	3	0	3
	<u>3</u>	<u>0</u>	<u>3</u>
	<u>12</u>	<u>15</u>	<u>17</u>

Fourth Semester

Nursing (maternal-child care)**	3	12	7
Nursing (seminar)**	2	6	4
Marriage & the family* (Soc 402)	3	0	3
Public speaking * (Engl 301)	3	0	3
	<u>11</u>	<u>18</u>	<u>17</u>

Total Semester Credit Hours: 75
 (Credit hours, nursing:) 36
 (Credit hours, academic:) 39

Curriculum Committee Report

*: Courses offered on Clemson campus. **: new courses ***: new course to be offered on Clemson Campus

New course descriptions are:

--Integrated Physical Science I and II.

These courses emphasize the organization and functioning of the human body and concepts from the biological and physical sciences which constitute the background for nursing practice.

--Principles of Nutrition.

Human nutrition is discussed in relation to man's needs for specific nutrients. Research methodology in nutrition investigations is explained. Laboratory includes work with small animals.

--Growth and Development.

A study of the physical and emotional growth of the child.

--Fundamentals of Nursing I-II.

These courses are designed to develop knowledge, understanding and skills basic to nursing. Included in the first course are concepts of nursing, health, nutrition, asepsis, medications and physical and emotional comfort and support with communications and interpersonal relations integrated. The second course is concerned with body responses to illness such as oxygen lack, loss of motion, digestive and endocrine disturbances and loss of body fluid. Carefully selected clinical experiences are provided throughout.

--General Nursing I (Care of Emotionally Disturbed.

Study and guided clinical practice in the care of patients with mental and emotional disorders.

--General Nursing II-III (Medical-surgical & Maternal-child Care).

These courses are concerned with the nursing care of mothers and infants during pregnancy, delivery and post partum periods; sick children; patients with heart, circulatory, deficiency and other diseases; the elderly patient and those with chronic and long-term illnesses. The role of the nurse in emergency and disaster situations is explored. Appropriate clinical experiences with various age groups are provided.

--Nursing Seminar.

Concerned with the opportunities available to the registered nurse and the responsibilities she has to nursing and to society. Includes clinical experiences in planning and executing nursing care plans for selected groups of patients in conjunction with the various coworkers present in hospital settings today.

Faculty Additions

Since the last issue of the Newsletter, additional persons have contracted to join the academic and research faculties in August. They are:

- Miss Jo Ann McNatt of Atlanta, who will become Instructor in French and Spanish. She has a B.A. degree from Furman, a M.A. from Emory, and has attended special summer institutes at the University of Georgia and West Virginia University. She has had eight years of full-time classroom teaching experience and is currently with the Fulton County (Ga.) school system.
- Mr. Ronald J. Knapp of Bowling Green, Ohio, will become Instructor of Sociology in August. He has the B.A. degree from Albion College and the M.A. from Bowling Green State University, where he is presently an instructor.

His teaching experience includes four years in college classrooms. In addition he has served as research technician in Lima Hospital, Lima, Ohio, and Medical Social Worker, St. Rita's Hospital, Bowling Green, Ohio.

Mr. Knapp is married and the father of one child.

- Dr. Sanford H. Newell, Jr. of Converse College will join the Modern Language faculty as visiting professor for the summer, 1965. He will direct the NDEA Overseas Institute which Clemson University will sponsor.

Dr. Newell has the B. A. degree from Millsaps; and the M.A. and Ph.D. degrees from the University of North Carolina. He has had fifteen years of college teaching experience, has a number of publications in his field, has directed five Language Institutes, and has been consultant to a number of educational groups interested in the teaching of French.

He is married and has four children.

- Miss Virginia Willis of Greenville, S. C. will join the Language faculty in August as a lecturer in Spanish. She has a B.A. degree from Furman University and has done a summer's study at Florida State. She has had teaching experience in the Greenville public schools and has been a language laboratory assistant at Furman.
- Mr. John C. DuVal of Boston, Mass., will join the English faculty in August as Assistant Professor of Speech. He has the B.A. and M.A. degrees from the University of Arkansas and has had teaching experience at Pembroke State College and Emerson College. He has also been editor of a weekly newspaper in Fort Smith, Arkansas, and has worked in radio at Fort Smith and at Juneau, Alaska. He is married to the former Evelyn Blanton of Raeford, N. C., and they have one child.
- Dr. Fred W. Chapman of Clinton, S. C. will join the Agricultural Economics faculty in July as assistant professor. His main assignment will be in research. He has his B.S. and M.S. degrees from Clemson and his Ph.D. from the University of Florida. His work experience includes five years with the USDA at Washington and one year as professor of economics at Presbyterian College. He is married to the former Nancy Bryant of Pelzer, S. C., and they have two children.

Federal Government Graduate Fellowships Awarded to Students at Clemson

During the coming academic year 63 students will be receiving Federal Government fellowships to support their work toward the Ph.D. degree. Each of these awards pays the student from \$2000 to \$3000 with most also carrying an allowance of \$400 or \$500 per dependent. Each award also gives to the University from \$2000 to \$3000 per student per year as a cost-of-education allowance. All but four of these awards are given for at least three years, and these four are subject to renewal.

Federal Government Graduate Fellowships Tenable at Clemson
1965-1966

	NDEA Fellow- ships	NASA Trainee- ship	NSF Science Faculty Fellowship	NSF Trainee- ship	NSF Fellow- ship	PHS Training Grants	PHS Fellow- ships	Total
<u>A & S</u>								
Chemistry	1	4						5
Physics	7	1			1			9
Chem Phys		3						3
								<u>17</u>
<u>Agriculture</u>								
Ag Econ	5							5
Agrcn	4							4
Ent	3							<u>3</u>
								12
<u>Engineering</u>								
Chem Engr	6	1	1	1		6		15
Civil Engr	2	1		2				5
Mech Engr				2				2
Engr Mech				2				2
Bio-Engr		2						2
Mat Engr		3						3
WRE						3	2	<u>5</u>
								34
	<u>28</u>	<u>15</u>	<u>1</u>	<u>7</u>	<u>1</u>	<u>9</u>	<u>2</u>	<u>63</u>

Gifts and Grants

The following gifts and grants have been announced since the April 15 issue of the Newsletter was printed.

--to Nelson Bauld (E.M.), \$7,300 from NSF for support of research entitled "A Study of Shallow Spherical Shells Under Hydrostatic Pressure."

--to Ronald L. Sack (CE), \$15,000 from NSF for support of research entitled "Elasto-Plastic Buckling of Plane Frames."

--to Textile Chemistry, \$13,900; Electrical Engineering, \$20,000; and Civil Engineering, \$9,600--from NSF for the purchase of undergraduate equipment items.

--to the Water Resources Institute, \$52,000 from the federal government for equipment.

--to the Sirrine Library (textiles), 25 volumes of the Cotton Year Book of the N. Y. Cotton Exchange; a gift from Mr. J. A. Chapman, Jr. of Inman Mills.

--to Chemistry, \$5,000 from NSF for undergraduate equipment.

--to Entomology, \$1,500 from Union Carbide Corporation for research at the Pee Dee Station on Insect Control in Cotton.

--to Horticulture, \$1,000 from Hercules Powder Company for research involving the comparison of certain Hercules nitrogenous sources on selected turf grasses and young and bearing peach trees.

--to Entomology, \$500 from Allied Chemical Corporation for research involving Kepone baits in tobacco.

--to Forestry, \$5,000 from USDA, Forest Service, Southeastern Forest Experiment Station, for research involving prescribed burning study in the S. C. Piedmont.

Personal Mention

--G. C. Robinson (CerE) presented two papers at the May 1-5 convention in Philadelphia of the American Ceramic Society Convention. S. F. Hulbert (CerE) also presented a paper.

--J. H. McElroy, Visiting Instructor in English, will return to Duke at the end of the semester. Miss Jane Merritt, Miss Nina Havnes, and Miss Marie Binsse (English and Modern Languages) have resigned their instructorships to accept employment in other institutions.

--J. B. Copeland (Agric) has been granted a continuation of his leave for study at the University of Wisconsin. Carl L. Lane (For) has been granted leave for study at Purdue.

--E. T. Sims, Jr. (Hort) recently completed the Basic Research Course in the Special Training Division, Oak Ridge Institute of Nuclear Studies, Oak Ridge, Tennessee.

Personal Mention - con't.

- M. H. Bruner (For) was appointed chairman of the Committee of the Society of American Foresters on State Registration and Licensing of Foresters.
K. Lehotsky (For) was appointed a member of the Awards Committee of the Appalachian Section of the Society.
- W. H. D. McGregor (For) published an article entitled "Successful Summer Planting of Slash Pine" in the March 1965 issue of the Journal of Forestry.
- Victor Hurst (DySci), J. W. Kelly (DySci), and R. D. Steer (Ext) attended the 3rd annual Southeastern Artificial Insemination Cooperative Meeting held May 13-14 at the Mississippi Artificial Breeders Cooperative, State College, Mississippi. Dr. Hurst is Secretary-Treasurer of the organization.
- R. W. Henningson (DySci) has been invited to moderate a panel composed of state Department of Agriculture officials and dealing with state laws, regulations, and programs relating to the composition of milk and milk products, during the program of the annual meeting of the Southern States Dairy Division of the National Association of State Departments of Agriculture in Williamsburg, Virginia, June 9-11.
- J. S. Dees (Engl), W. B. Clement (EG), and Mrs. Janet Wagner (Ger) have resigned their teaching positions, effective at the end of the academic year.
- E. P. Willey (Engl) has been granted leave to do doctoral study at the University of North Carolina.
- Edward S. Olson (Tex) is coordinator for a Color Measurement Seminar to be conducted by the School of Industrial Management and Textile Science, June 14-18.
- E. Laitala was chairman of a session at the May 15 conference at Clemson of the American Society of Tool and Manufacturing Engineers (Greenville-Spartanburg Chapter).
- A. Ray Abernathy (CE) presented a paper on "Microbial Decomposition of Lodium Lignin Sulfonate" and discussed Research Activities of the Clemson University Water Resources Research Institute at the 14th Southern Water Resources and Pollution Control Conference in Chapel Hill, N. C., on April 16.
- Judson Hair (student health) presided at a session of the American College Health Association, April 28-May 1, at Miami Beach.
- On April 22, 1965 the Clemson University Council on Water Policy was formally organized. Officers elected were J. M. Stepp (Agric Econ), Chairman; A. W. Snell (Agric Engr), Vice-Chairman; and B. R. Skelton (econ), Secretary.
- C. B. Green (Engl) has an article "The Rise and Fall of Local Color in Southern Literature" in the Winter issue of the Mississippi Quarterly.
- Harriet Holman (Engl) is editor of The Verse of Floride Clemson, just published by the University of S. C. Press. The book, at \$3.25, is available from the University of S. C. Press, Columbia, S. C. 29208.
- Ireland Regnier (Arch) and John Acorn (Arch) were both represented in the 6th Annual Piedmont Painting and Sculpture Exhibition, Mint Museum of Art, Charlotte, N.C. The exhibition includes the selected work of artists from ten Southeastern states. They jury selected J. Acorn's entries for Honorable Mention.

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Newsletter

NOT FOR PUBLICATION

Vol. 4 No. 18

June 1, 1965

Summer Calendar

June 1-17		Exhibition at Lee Gallery, School of Architecture. Theses of 5th year architectural students: A display of architectural theses completed in the spring semester of 1965. Other student work will be on display.
June 7	M	Matriculation for new students, 1st Summer Session.
June 8	T	1st Summer Session matriculation and registration.
June 9	W	1st Summer Session classes begin.
June 10	Th	Lecture by Dr. Bell I. Wiley (Emory University) on "The Common Man in Crisis." 8 p.m., Civil Engineering Auditorium.
July 12	M	Matriculation and registration, 2nd Summer Session.
August 14	S	Summer School faculty meeting. Time to be announced.
August 14	S	Summer School graduation. Time to be announced.
August 18-19	W,Th	Orientation for new faculty.
August 20	F	Meeting of faculty and staff, 10:30 a.m., Chemistry Bldg.

Special Science Lectures in
Connection with the NSF Institute
for Science Teachers

June 18	F	Dr. Andrew Robeson, Head, Dept. of Physics, V.P.I. at 3:00 p.m.
June 24	Th	Dr. W. F. Tanner, Professor of Geology, Florida State University at 3:00 p.m.
June 29	T	Dr. C. E. Hall, Professor of Biophysics, M.I.T. (jointly with Science Training Program) at 4:00 p.m.
July 12	M	Dr. L. F. Fieser, Professor of Chemistry, Harvard at 4:00 p.m.

All talks will be in Room 1, Brackett Hall, unless schedule changes are necessitated by construction. Interested faculty are invited.

Note on Newsletter For Summer Months

The Newsletter will not be printed during the months of June and July. The next issue will be dated August 15.

ALUMNI REUNION WEEKEND: RECEPTION, SEMINAR, BANQUET -- A REPEAT ANNOUNCEMENT

Clemson faculty and staff and their wives are invited to attend an informal reception at the President's Home, Friday evening, June 4, from 8:00 to 10:00 p.m. President and Mrs. Edwards will be hosts to visiting alumni, their wives and guests, who will be on campus for reunion activities June 4, 5 and 6. Faculty and staff are invited to join in the activities whenever they can.

Four Clemson movies will be shown in the air conditioned student lounge, Friday afternoon, June 4, at 2:30 p.m. You may come and go as you wish, seeing one, two, three or all four movies. The program will include: "This is Clemson", "A Challenge Met", NBC-TV's "College Bowl" (Clemson vs. Fairfield University) and "A Letter From Clemson".

The fourth annual Alumni Seminar will be conducted this year on Saturday afternoon, June 5, in the Tillman Hall Auditorium, following the alumni General Assembly which begins at 2:00 p.m. The seminar program is planned for alumni, wives and guests and is coordinated by the office of the Dean of the University.

Tickets are now on sale at the Alumni Office in the Trustee House for the Alumni Banquet to be held in the University Dining Room, Saturday evening, June 5, at 7:00 p.m. Faculty and staff may purchase their tickets in advance or obtain them the day of the banquet on the loggia of the Student Center. Five alumni will receive signal recognition at the banquet as recipients of 1965 Distinguished Alumni Awards. They are: Goode Bryan '18 of Greenville, William H. Grier '23 of Rock Hill, E. Hugh Agnew '16 of Starr, Walter Cox '39 and George H. Aull '19 of Clemson.

SEASON TICKET APPLICATION FORMS FOR THE 1965-1966 SPORTS SEASON

Season ticket application forms for the 1965-1966 sports season have been sent to deans and directors for distribution to faculty and other employees of Clemson. Anyone who has not received an application should contact his dean or director or call the Athletic Ticket Office at extension 276. Priority for faculty and employees expires on June 10. Those leaving Clemson for the summer should be sure to complete applications prior to departing.

A Note on Social Security

Peggy Heim, Staff Economist with the Washington office of AAUP is the source for the following statement:

"A college professor (age 62-64 and full insured) may draw social security benefits during summer months of nonemployment even though he plans to resume teaching in the fall or receives his academic year salary in twelve monthly installments. But his subsequent social security benefits are reduced if he elects early participation."

First Graduates in Departmental Honors Programs.

In February, 1962, the Clemson University Honors Program was instituted. At graduation on May 29, 1965, six students earned bachelor's degrees with departmental honors in field of their major concentration. They are:

Departmental Honors in Electrical Engineering

- William Frederick Gryder, Rock Hill
- Roger Allen McClain, Clemson
- John Harry Scherer, Beaufort

Departmental Honors in Mathematics

- Stephen Cooley King, Williamston

Departmental Honors in Textile Chemistry

- George Bryan Sproles, Silver Spring, Maryland
- Marshall White, Jr., Rock Hill

Dean Macaulay to Return to Full-Time Teaching

Graduate Dean Hugh Macaulay, at his own insistence, will return to full-time teaching in August. By vote of the Educational Council, which accepted his resignation with great reluctance, he was given appointment as Alumni Professor of Economics, effective August 1.

Dr. Macaulay has been Graduate Dean since 1960. Under his guidance the number of graduate students has increased markedly, the standards of student admission have been much improved, and doctoral programs have been implemented. The 27 doctoral graduates from Clemson have all finished since 1961.

In noting Dean Macaulay's decision to resume a full-time teaching role, the Education Council adopted the following resolution:

Resolution

"On December 20, 1960, Dr. Hugh H. Macaulay left his position with the Office of Tax Analysis of the United States Treasury Department to return to his native state of South Carolina and to Clemson University where he had earlier served with distinction as a member of the Social Sciences Department. Thus began his tenure of four and one-half years as Dean of the Graduate School and Professor of Economics.

During this time, under his capable guidance, the enrollment in Graduate School more than doubled, the number of fellowships and scholarships to graduate students increased significantly, and a number of graduate programs leading to both the Master's and Ph.D. degrees were initiated. He has won and earned the respect of his colleagues for his sound judgment, candor, alacrity and wise counsel.

Be it resolved, therefore, that the Educational Council expresses to Dean Macaulay its deep appreciation for his outstanding and dedicated service as Dean of the Graduate School and that a copy of this resolution be transmitted to Dean Macaulay."

Note on Payroll for Forthcoming Academic Year

When the first semester of the 1965-66 academic year begins (August 15), each faculty member paid on an academic year basis will be paid in ten checks (five each semester). The payment schedule will be: 1/18 on August 31, 1965; 1/9 at the end of each month for the months of September, October, November, December, January, February, March and April; 1/18 on May 15, 1966.

Note: A full month's insurance premium will be deducted from the August 31, 1965 check and insurance premiums for May, June and July will be deducted from the May 15, 1966 check.

By this schedule the University will be paying for work done as each work period is completed. Under the old twelve-check arrangement, work done in an academic year was paid for over a calendar year.

Victor Hurst to Become Graduate Dean

As noted elsewhere in the Newsletter Dean Hugh Macaulay has requested that he be allowed to resume full-time teaching duties. Dr. Victor Hurst (Dairy Sci.) will replace Dean Macaulay, effective July 1. Dr. Hurst has been on the Clemson faculty since 1948 and was one of the first two teachers honored as alumni professors. He has served on numerous university committees, and is currently a member of the Graduate Council. During 1962-63 he was President of the Academic Faculty Senate. He has also been an elected member of the Research Faculty Council.

University to Establish School of Education--Dr. Harold Landrith to Become Dean

On July 1, 1965, a School of Education will be established at Clemson, consisting of the departments of Agricultural Education, Industrial Education, and Secondary Education. The organization of the new school will include a special planning council made up in part of academic representatives from outside the new school and of secondary school administrators. The planning council will be advisory in nature.

The curriculum in Agricultural Education will be jointly administered by the School of Education and the College of Agriculture and Biological Sciences, following the pattern established some years ago for joint administration of Agricultural Engineering.

The current programs in teacher training at the University will not be changed in philosophy. The purpose of the new School is rather to gain a tighter administrative control over all Education programs, and to fit teacher training properly into the academic organization.

Dr. Harold Landrith (Soc. Sci) will be dean of the School. He is a 1948 honor graduate of Clemson, has a M.A. in history from Vanderbilt, and a D.Ed. from the University of Houston.

His experience in education includes three years in administration with the USAF Electronics School, Keesler Air Force Base; four years on the faculty of the University of Mississippi's Biloxi Center; and six years as social sciences department head at South Texas College. He has been a member of our faculty since 1961, serving as chairman of the secondary education teacher training program.

Appointment of Associate Director of Extension Service Noted

Dr. Wayne T. O'Dell will become Associate Director of the Agricultural Extension Service on July 1. He will share the work from July through December with Mr. Thomas W. Morgan, who has been Associate Director for many years and who is to retire due to age on December 31.

Dr. O'Dell has B.S. and M.S. degrees from Clemson. His doctorate is from Pennsylvania State University. He was a staff member at Pennsylvania State from 1953 until 1962 when he joined the Clemson Extension Service as Dairy Science Extension Leader.

Alfred Newton to Head Industrial Education Department

Effective July 1, Dr. Alfred Newton will become head of the Department of Industrial Education. His bachelor's and master's degrees were earned at Clemson; his doctorate, in educational administration, is from the University of Tennessee.

Dr. Newton's educational experience includes three years as a teacher in the Spartanburg City Schools, two years as a teaching assistant at the University of Tennessee, and seven years on the Clemson faculty.

Engineering Graphics to Become Part of Industrial Engineering Department

Effective July 1, the department of Engineering Graphics will be discontinued as such and the graphics program will become part of Industrial Engineering. The service functions of the graphics program will be expanded to support all other engineering curricula. Robert L. Perry will transfer from Mechanical Engineering to the EG-IE faculty; and Douglas Bradbury will transfer from graphics to Mechanical Engineering.

Agricultural Chemistry Research Head Resigns

Dr. Hubert Webb, head of the Agricultural Chemistry Research Department, has resigned, effective July 1, to accept employment in Columbia. He and his family will move to Columbia after completion of a home they are building there.

Dr. Webb joined the Clemson research faculty in 1938 and has served continuously since then in research and administrative positions. For a four year period (1951-1955) he headed the university Graduate Committee, and in that position was responsible for organizing the first efforts of Clemson to have a graduate division of study. He has been head of agricultural chemistry research since 1951.

Agricultural Chemistry Research Department to Change Name--Norwood Page to be New Head

On July 1 the existing department of Agricultural Chemistry Research will be changed in name to the Department of Agricultural Chemical Services and Dr. Norwood Page will become department head.

Dr. Page received his B.S. degree from Clemson in 1939, his M.S. from North Carolina State in 1941, and his Ph.D. from the University of Georgia in 1959. His professional experience began at Clemson in 1941, as Assistant Chemist in the Fertilizer Inspection & Analysis Department. He has been Assistant Professor of Chemistry, Associate Agronomist with the S. C. Agricultural Experiment Station, Associate Professor of Agronomy, and, since 1963, Professor of Agronomy in charge of Soil Testing.

After July 1, all routine testing and analytical services will be consolidated in this one department.

Promotions Announted for Seventeen Members of Academic Faculty

Seventeen faculty members will be promoted in rank, effective with the new academic year for teachers and the new fiscal year for researchers. Those being promoted are:

To Professor:

- Ralph Ashworth (Botany)
- Harold Cooledge (Arch.)
- J. T. Lazar (Dairy Sci.)
- A. L. Shewfelt (Food Sci. & Biochem.)
- H. E. Vogel (Physics)
- Joe Young (Arch.)
- Harold Landrith (Educ.)

To Associate Professor:

- J. C. Fanning (Chemistry)
- N. P. Marullo (Chemistry)
- M. G. Miller (Physics)
- A. S. Tombes (Ento)
- S. G. Turnipseed (Ento.)
- H. O. Wheeler (Food Sci. & Biochem.)

To Assistant Professor:

- V. S. Griffin (Geol.)
- M. Risko (French)
- J. V. Reel (History)
- B. J. Skelton (Hort.)
- P. K. Birkhead (Geol.)

Academic Tenure Approved For Eighteen

Under provisions of the University faculty tenure policy, academic tenure has been approved for the following eighteen faculty members:

- John T. Acorn (Arch)
- C. E. Bardsley (Ag & B.S.)
- Virginia Bardsley (A&S)
- Susan H. Brown (A&S)
- Patricia K. Hill (A&S)
- H. F. Landrith (Educ)
- Max G. Miller (A&S)
- W. H. D. McGregor (Ag & B.S.)
- John E. Pinckney (Arch)
- Ireland Regnier (Arch)
- Paul Robbins (IM-TS)
- Malcolm Skove (A&S)
- Billy R. Skelton (A&S)
- A. S. Tombes (Ag & B.S.)
- S. G. Turnipseed (Ag & B.S.)
- J. P. Uldrick (Engr.)
- Clinton Whitehurst (IM-TS)
- W. T. Zink (Engr.)

Extension Service Promotes Eleven

The Agricultural Extension Service will promote eleven persons in the organization, effective July 1. Those to be promoted are:

- Walter A. Ridgeway, Associate Co. Agent, Cherokee, to County Agent, Cherokee
- James O. Donkel, Assistant Co. Agent, Newberry, to Associate Co. Agent, Newberry
- Robert M. Johnston, Asst. Co. Agent, Williamsburg, to Associate Co. Agent, Williamsburg
- B. T. McIntosh, Assistant Co. Agent, Charleston, to Associate Co. Agent, Charleston
- Ray C. Smith, Asst. County Agent, Marlboro, to Assoc. Co. Agent, Marlboro
- Christopher N. Wilson, Assistant Co. Agent, Lancaster, to Associate Co. Agent, Lancaster
- Cecil D. Clawson, Assistant Dairy Sci. Specialist to Associate Dairy Sci. specialist
- Carolyn Coleman, Asst. Home Dem. Agent, Chesterfield, to Home Dem. Agent, Chester
- Hazel M. Jenkinson, Asst. Home Dem. Agent, Aiken, to Home Dem. Agent, Georgetown
- Nancy C. Patterson, Asst. Home Dem. Agent, Oconee, to Home Dem. Agent, Lancaster

New Senate Officers

The Academic Faculty Senate has elected new officers for the period May 1965-May 1966.

The new Senate President is J. M. Stepp (Agricultural Economics). Dr. Stepp joined the Clemson faculty in 1940 and has been a professor since 1948. He was one of the first group of Senators elected in 1956, serving a three-year term at that time. He has been active in community as well as university affairs and has served at one time or another as member or chairman of several faculty standing committees.

A. D. Lewis (M.E.) has been elected vice-president. Mr. Lewis joined the university faculty in 1941 and has been a professor since 1950. Like Dr. Stepp, he has been active as a member of university committees and for the past two years has been acting head of the Mechanical Engineering department.

The new Secretary of the Senate is Herman M. Felder (English). Mr. Felder joined the faculty in 1946 and has been an associate professor since 1958. He was a member of the first academic Senate at Clemson, serving from 1956 through 1959, and has worked with university committees and with the local AAUP Chapter.

Research Faculty Amend Its By-Laws to Offer Definition of Research

The Research Faculty at a regular meeting on May 12 voted to amend the By-Laws of the faculty so as to include a definition of research. Section 3 of Article I of the Research Faculty By-Laws now reads:

Section 3, Definition of Research.

Research consists of any activity which is undertaken with the objective of "pushing back the frontiers of knowledge." It involves the diligent seeking after new facts and/or principles through investigation, inquiry, scrutiny, examination, and interpretation. This includes the consideration of areas not previously investigated and the re-examination of basic concepts of principles for application to new processes. The term thus implies a degree of originality in the investigator's approach to a problem.

New Faculty Members

The following people have contracted to join the Clemson faculties since the May 15 issue of the Newsletter was printed:

--Miss Lucy Wynn Bowers of Darlington, S. C., and Durham, N. C., will join the English faculty in August as an Instructor. She has a B.A. degree from Furman University where she was vice-president of student government; and a M.A. degree from Duke. She has had previous employment by the Furman library and the Furman Department of Education.

--Rudolph Prins of Grand Rapids, Michigan, and Louisville, Kentucky, will join the faculty in Zoology in July. His B.A. degree is from Calvin College in Michigan; his M.A. from Western Michigan University; and his Ph.D. from the University of Louisville. He has had six years of teaching experience, three in high school and two at the University of Louisville where he is now employed. He is married and has two children.

--Mrs. Chintakindi Lakshmi-Bai of Visakhapatnam, South India, and Kinston, Ontario, Canada, will join the faculty in electrical engineering in August as an assistant professor. She has the B.Sc. from Mysore University, the M.S. from the University of Wisconsin, and the Ph.D. from the Indiana Institute of Science, Bangalore, India. Dr. Lakshmi-Bai has had five years of university teaching experience (three in India and two in Canada). She is presently Sessional Lecturer at the University of Ottawa. She is the author or co-author of twelve published research studies. Dr. Lakshmi-Bai is married and has a son nine years of age.

--Mrs. Lida Williams of Anderson will join the faculty of Arts and Sciences in August as professor of nursing and director of the Associate degree program. She has a B.S.N.E. from Western Reserve University and has done graduate study at Columbia University Teachers College. She has served as Director of Nursing, Samaritan Hospital, Troy, N. Y.; Educational Director of the School of Nursing, Rex Hospital, Raleigh, N.C.; Director of Nursing, Self Memorial Hospital, Greenwood, S. C.; and Director of the Diploma Program, Anderson Hospital.

--Mrs. Aileen S. Prevost of Anderson will join the A&S faculty in August as Assistant Professor of Nursing. She has a B.S.N. from Queens College, Charlotte, N.C., and a M.N. from Emory University. She has taught at Rex Hospital, Raleigh, and at Anderson.

--Miss Edith G. Gunter of Anderson will join the A&S faculty in August as instructor in nursing. She holds the B.S.N. from Duke and has done graduate study at Columbia University and at Furman University. She has taught at Anderson College and at the hospital.

--Joseph L. Hinson of Greenville will join the A&S faculty in August as lecturer in the nursing program. He will lecture in general science. Mr. Hinson has a B.S. degree from Bob Jones University, a M.S. degree from Clemson, and is a candidate for the Ph.D. at Clemson. He is a regular faculty member at Bob Jones University.

--Mrs. Amelia V. Jameson, Mr. Ruth C. T. Bremer, Mrs. Jane E. Pregnell, Mrs. Eleanor Young, and Mrs. Mariam I. Corder, all of Anderson, will join the A&S faculty in August as assistants in nursing. Mrs. Jameson is a graduate of the Anderson Hospital diploma program and has done additional study at Erskine College and Anderson College; Mrs. Bremer has studied at Anderson College, Clemson and the University of South Carolina; Mrs. Pregnall has a B.S. Degree from the University of South Carolina; Mrs. Young has a B.S. degree from Hunter College; and Mrs. Corder is a graduate of the Roper Hospital training school for nursing, Charleston, S. C.

NEW FACULTY MEMBERS - Con't.

--Andy Sobczyk of Carbondale, Illinois, will join the mathematics faculty in August as Maner Martin Professor of Mathematics. He has B.S. and M.S. degrees from the University of Minnesota and the Ph.D. from Princeton. He has had eighteen years of teaching experience and is currently professor of mathematics at The University of Southern Illinois. He is the author of more than forty papers in mathematical topics. He is married and has five children.

--Ralph H. Ramsey, III of Brevard, North Carolina will join the Agricultural Engineering faculty June 1 as an Instructor. He has the B.S. and M.S. degrees from Clemson, is married, and has one child.

REPORT: RESEARCH FACULTY MEETING

Dean J. K. Williams, Chairman of the Research Faculty, called the meeting to order at 4:05 p.m. May 12, 1965. The minutes of May 15, 1964, were read and approved as read.

Dr. P. E. Robbins presented a report on the accomplishments of the Research Faculty Council for the past year.

Dr. P. E. Robbins made a motion that the definition of research as proposed by the research council be approved and inserted in the Faculty Manual. The motion was seconded and carried.

Dean J. K. Williams reported on a number of items. Among them were:

1. Equipment list is being revised each June to include new equipment. List will be distributed after July 1.
2. The Research personnel evaluation form is in the hands of the deans for their approval.
3. Salaries will be increased at least 3% by state law, with some merit raises above this figure.
4. The National Science Foundation has approved matching funds to several departments and donated two analogue computers to the University.
5. A new computer, IBM 360, has been ordered and updated with accessories. This computer is to arrive by July, 1966.
6. The library is well underway. Five hundred thousand dollars has been requested from H. E. W. for additional library facilities. New copying equipment is also planned to be installed in the library.
7. A new field house large enough to house the entire student body and faculty is needed for concerts, public events, etc.
8. At the present time there is 6 1/2 million dollars worth of construction under way at Clemson University, including the Library, Industrial Engineering, and Chemistry Department annex.

REPORT RESEARCH FACULTY - con't.

9. Three departments (Agricultural Education, Industrial Education and Secondary Education) are to be combined as the School of Education and Dr. Harold Landrith will be the new dean as of July 1.

10. Dean Hugh Macaulay has asked to be allowed to resume full-time teaching. Dr. Victor Hurst will be his replacement.

11. There are currently 110 full-time equivalent researchers at Clemson University and the dollar value to this institution amounts to \$4.3 million dollars. This is an increase of 1 million dollars over the previous year.

Dean Hugh Macaulay gave the graduate school report indicating:

1. The publication of research in scientific journals, and presentation of papers at scholarly societies.

2. The tremendous increase in the amount of research at Clemson and particularly in the schools of engineering and arts and sciences.

3. Information is available to persons interested in obtaining federal grants-in-aid as well as research appointments available at other various federal agencies.

The meeting adjourned at 5:00 p.m.

REPORT OF FACULTY SENATE MEETING

The 107th meeting of the Faculty Senate was called to order at 4:00 p.m. on May 11, 1965, by President John Miller, who welcomed new members, then asked for committee reports. These were given as follows:

1. Dr. Shewfelt, of the Welfare Committee, said that the questionnaire which was circulated to the faculty concerning a proposed funeral society showed so much interest in the formation of such a plan that the Welfare Committee passed this resolution:

"Resolved that the newly-elected President of the Faculty Senate appoint three members of the Senate to be steering committee for a funeral society; that the steering committee be authorized to contact other community organizations which will be invited to appoint one additional member each to the steering committee; and that the steering committee plan and prepare for an open public meeting to consider the organization of a funeral society." It was then moved and seconded that this resolution be adopted by the Senate. The motion passed.

Next Dr. Shewfelt announced that, because of many inquiries about the revision in the faculty pay schedule, his committee had passed a resolution to request the University Comptroller to address the next meeting of the Senate on this matter. Dr. Miller, however, said that he had already talked with both Mr. Wilson and Dean Williams on the subject and had found that it is too late to change anything for next year. However, for the future the administration is willing to distribute salaries in any way the faculty wish, so long as this is done during the normal nine month teaching period rather than by the old method of dividing the pay for the nine months' work into twelve monthly payments.

REPORT OF FACULTY SENATE MEETING - con't.

2. Professor Ball of the Admissions and Scholarship Committee distributed copies of a proposal adopted by his committee to ask the University to consider a plan for testing all freshmen. This proposal reads as follows:

The Scholarship and Admissions Committee of the Faculty Senate recommends that the following proposals be adopted:

- A. That all entering Freshmen be required to take the following tests with administration by Clemson University personnel.
 - (1) Valid I.Q. and significant achievement (College Board)
 - (2) Aptitude test battery
 - (3) Reading Achievement
- B. That the University be responsible for interviews between a trained University counselor, the student, and the student's parents only in such cases where the test interpreter deems such an interview necessary.
- C. That at least one-half of the cost of the test and interpretation be borne by the entering freshman.

Mr. Ball moved the adoption of this proposal. It was seconded, but an amendment to the motion was then proposed by Mr. Felder, that section 1 of the recommendation be changed to read "That all entering freshmen be required to take a battery of tests recommended by the University Counseling service."

After the amendment was passed, the amended motion also was passed.

President Miller then gave us as information the fact that recommended reading lists for high school students have been made out and are being distributed.

The following officers were elected for next year:

President-----J. M. Stepp
Vice President-----A. D. Lewis
Secretary-----H. M. Felder

The elections for members of the Committee on Committees followed with the following results:

Agriculture--M. A. Boone
Industrial Management-Textile Science--S. M. Willis
Architecture--J. E. Pickney
Engineering--J. T. Long
Arts and Sciences--C. Q. Brown

Course Preferences of Candidates for Admission in June, July, and August 1965

Major Course	Accepted Candidates		Other Active		Total
	Men	Women	Candidates		
Agriculture	32	2	15		49
Agriculture Economics	2	0	4		6
Agriculture Education	6	0	3		9
Agriculture Engineering	14	0	5		19
Agronomy	7	0	1		8
Animal Science	3	0	5		8
Biology	33	10	16		59
Dairy Science	4	0	2		6
Entomology	4	0	0		4
Food Science	2	0	2		4
Forestry	52	0	40		92
Horticulture	2	3	6		11
Poultry Science	2	0	1		3
Pre-Veterinary	31	4	16		51
	194	19	116		329
	10.5%	12.9%			12.2%
Architecture	120	6	38		164
Building Construction	4	0	2		6
	124	6	40		170
	6.7%	4.1%			6.3%
Arts & Sciences	171	56	128		355
Chemistry	62	5	12		79
Geology	5	0	1		6
Mathematics	80	32	16		128
Medical Technology	5	12	2		19
Physics	51	1	5		57
Pre-Medicine	149	8	27		184
Pre-Pharmacy	8	1	4		13
Science Teaching	3	1	0		4
	534	116	195		845
	28.9%	78.9%			31.3%
Engineering	315	4	72		391
Ceramic Engineering	25	0	3		28
Chemical Engineering	68	0	14		82
Civil Engineering	124	0	56		180
Electrical Engineering	165	0	46		211
Industrial Education	2	0	2		4
Industrial Engineering	26	0	11		37
Mechanical Engineering	90	0	40		130
Metallurgical Engineering	3	0	0		3
	818	4	244		1066
	44.2%	2.7%			39.5%
Industrial Management	144	1	83		228
Textile Chemistry	7	0	7		14
Textiles	28	1	19		48
	179	2	109		290
	9.7%	1.4%			10.7%
Total Expressing Major Course Choice	1849	147	704		2700
	100. %	100. %			100%
Undecided	127	15	71		213
GRAND TOTAL	1976	162	775		2913

The column of 775 Other Active Candidates represents the number of applications on which formal action has not been taken, and it is expected that many of these will qualify for an acceptance. In fact, on the basis of approximate rank-in-class information, 45 of these candidates have been assured of acceptance for August.

Scientific Personnel in Government Employ--A Note from NSF

Federal agencies employed some 175,500 scientific and technical personnel as of October 1962, according to a new National Science Foundation publication.

Analyzing the results of two Civil Service Commission surveys, the report gives the numbers of civilian scientific, engineering, and health personnel employed by Federal agencies in October 1961 and 1962. Data are given on numbers employed in research and development for professional and for non-professional personnel. The report also presents separate information on women in professional scientific and technical positions.

Engineers, numbering 67,500 accounted for 39 per cent of the total professional group; scientific personnel numbered 62,000 and health personnel 45,000. Both professional and nonprofessional scientific and technical employment increased 12 per cent from 1960 to 1962.

In 1962 the Department of Defense, as in 1961 and 1960, was the largest Federal employer with 35 per cent of scientific and technical professionals (two-thirds of them engineers) and 43 per cent of all nonprofessionals. Defense was also the largest employer of professional personnel engaged in research and development, employing almost one-half of the 52,000 in these activities.

The number of professional scientific and technical personnel in research and development increased 18 per cent from 1960 and 1962, most of the increase occurring from 1961 to 1962. Women, who made up 18 per cent of the total employed professionals in 1962, showed a slight decline from previous years.

Student and Automobiles

The Board of Trustees at a meeting on May 28 added strength to the University regulations concerning student automobiles. These regulations, effective in full with the Summer Sessions, are:

- (1) Students in the freshman year will not be premitted to have automobiles in Clemson.
- (2) Students who have not achieved a grade-point ratio of 1.4 and 30 credits during the school year will not be permitted to have automobiles in Clemson.
- (3) Commuters, veterans and physically handicapped students may be excepted from this rule by the Dean of Student Affairs.
- (4) All students having automobiles at Clemson must pay an automobile registration fee.
- (5) Students who are classified as sophomores and have not achieved the grade-point ratio required of their class for graduation will not be permitted to have automobiles in Clemson.

Grants and Gifts

Securities with market value exceeding \$100,000 have been given to the Clemson University Foundation by the R. A. Bowen Trust, of Macon, Ga., "to promote the cause of higher education at Clemson University."

Principal amount of the gift will be held intact by the Clemson Foundation in a separate fund to be known as the Robert Adger Bowen Fund in honor of Robert Adger Bowen of the Clemson Class of 1917. Income from the fund will be used for loans to students, or in the discretion of Foundation trustees, for scholarships, fellowships, or the support of a professorship.

Mr. Bowen, originally from Pendleton, S.C., has been a leading citizen of Macon for many years. He is founder of R. A. Bowen, Inc., general contractors, and president of Bibb Concrete Pipe Co. His home is at 2880 Ingleside Avenue, Macon.

Other grants and gifts received since the May 15 Newsletter was printed include:

--From R. J. Reynolds Tobacco Company to Pee Dee Station, \$10,000 for research on tobacco genetics, cultural practices for tobacco production, nematode and disease control, and tobacco mechanization.

--From Dow Chemical Company to Poultry Science, \$200 for study of the effectiveness of an insecticide in controlling flies in cage-type poultry operations.

--From Olin Mathieson Chemical Corporation (Squibb Institute for Medical Research) to Entomology and Zoology, \$300 for study of the control of house fly populations with the chemosterilant, apholate.

--From FMC Corporation to Entomology, \$600 for evaluation of thiodanmethyl parathion and NIA 10242 for general insect control on soybeans.

--From Rembert-Moore Machinery Company to Horticulture Dept., loan of two Macrey Electronic purification systems, used in research involving the use of Ozone to increase shelf life of horticultural crops.

--From Dow Chemical Co., to Chemical Engineering, \$1,000 for student financial assistance.

--From the Allied Chemical Foundation to Textile Science, \$1,500 for student financial assistance.

Personal Mention

--B. E. Davis (Agric) has been granted leave to do doctoral study at Michigan State.

--V. S. Griffin, Jr. (Geol) is to attend a summer conference at Michigan Technological University, Houghton, Michigan, from June 15-30.

--L. J. Newell (Hist) has resigned his instructorship, effective May 31.

--J. F. Pittman (AgEcon) has had his leave extended for an additional year. He is doing doctoral study at N. C. State University.

--V. M. Kirk (Ento-Zoo) has resigned his position at the Pee Dee Station to work with the Cereal Crops Lab in Brookings, S. D.

Personal Mention - con't.

- K. L. Swinney (Plty Sci) has been granted leave to do doctoral study at Mich. State University.
- J. H. Ware (Phil) will serve as Clemson's representative on the S. C. Committee on Non-Western Studies.
- L. D. Huff (Phys) will serve as a national panelist for the evaluation of graduate programs for which NDEA fellowship assistance has been requested. The panel will meet in Washington June 16-18.
- Wm. Chalupa, W. A. King, R. W. Henningson and R. A. McKellar (Dairy Sci) will present papers at the meeting of the American Dairy Science Assoc. at Lexington, Ky., June 20-23;
- W. A. King (Dairy Sci) will present a paper at the American Grassland Council (Second National Field Day) at Middle Tenn. Experiment Sta, Columbia, Tenn., June 23-25.
- E. P. Willey (Engl) has been granted leave to do graduate study at the University of N. C.
- J. A. Gilreath (Phys) has been granted leave to continue his graduate study.
- J. C. Martin, P. N. Marinos and W. D. Stanley (EE) will attend NASA programs this summer. Dr. Martin will go to Stanford; Dr. Marinos to Langley Field; and Dr. Stanley to Greenbelt, Md.
- Nelson Bauld (EM) will attend a summer program on fellowship to the Manned Spacecraft Center, University of Houston.
- D. F. Bruley (Ch.E.) presented a paper at the recent meeting of the American Institute of Chemical Engineers in San Francisco.
- J. A. Chisman (IE) presented a paper at the May meeting of the American Institute of Industrial Engineers in Chicago.
- Harvey E. Morgan, Jr. (In.Ed) participated in an inspection of the Greensboro, N.C., public schools as a member of the Southern Association of Colleges and School Evaluation Committee, May 19-22.
- G. C. Robinson (CerE) presented a paper to a meeting of Southeastern Brick Manufacturers of Sea Island, Ga., May 18.
- A. D. Lewis (ME) presented a paper at the April ASME-RAC meeting in Gatlinburg, Tenn. Mr. Jimmy V. Cely, (M.E. student) also presented a paper and won third place in the Student Division.
- Clayton Aucoin (Math) has been selected by the NSF and Mathematics Association of America to serve as a special lecturer during 1965-66. Dr. Aucoin will make talks to various Southern and Southeastern math faculties at various times during the year.
- B. E. Dunkle has been accepted as a participant in the 1965 Summer Institute in Numerical and Statistical Methods of Digital Computing and Analog Computation at the University of Missouri, Rolla, Mo., June 7-July 30.

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